EASE Working Paper Series

Volume 1

Emerging Voices: The Proceedings of Anthrozoology as International Practice (AIP) 2021 Conference

AIP Session1: Mourning, Loss, and Welfare.

A screenshot from Heidi Scheidl's presentation, 'Mourning Harold' (4 March 2021)

University of Exeter

Exeter Anthrozoology as Symbiotic Ethics (EASE) Working Group

The EASE working group brings together academics and postgraduate research students from diverse disciplinary backgrounds across the University of Exeter (including anthropology, philosophy, sociology, geography, bioscience, psychology, animal behaviour and computer science) whose research and teaching interests explore and address human interactions with other living things.

EASE was founded in 2016 following a generous philanthropic donation to support the development of our existing teaching provision and research expertise in Anthrozoology (conceived broadly here as the multi-disciplinary, cross-cultural study of human interactions with other animals).

Reframing Anthrozoology as Symbiotic Ethics

The principal contention of the working group is that the recognition of other animals as ethically significant beings is both a necessary part of a sound understanding of these interactions, and a moral imperative. Our particular model of qualitative Anthrozoology places emphasis on (i) an empathetic 'living with' (symbiosis) or alongside other animals (either physically, for example with companion animals, or indirectly, for example through ethical consumerism), (ii) a respect for them as autonomous subjects, (iii) an attempt to grasp, wherever possible, their perspectives as well as those of our human subjects, and (iv) a holistic understanding of the context within which interactions occur. Moreover, we suggest that (v) academic research concerned with understanding these trans-species interactions should have some meaningful, practical application and ultimately improve the lives of our research subjects. Consequently, we propose that Anthrozoology should be reframed as Symbiotic Ethics, to acknowledge the inextricable connections we share with other life forms at a time when our collective futures hang precariously in the balance.

EASE website: https://sociology.exeter.ac.uk/research/ease/

The Anthrozoology as Symbiotic Ethics blog:
https://anthrozoologyassymbioticethics.wordpress.com/

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EASE Working Paper Series Editors' Introduction

Samantha Hurn and Emily Stone

Exeter Anthrozoology as Symbiotic Ethics (EASE) Working Group, University of Exeter, UK

Welcome to the inaugural issue of the Exeter Anthrozoology as Symbiotic Ethics (EASE) Working Paper Series. The series has been established by an editorial board of EASE academic staff to provide a forum for students and early career researchers to publish work that engages with the aims and mission statement of the EASE working group.

Background to EASE

In 2016, the EASE working group was founded at the University of Exeter with the aim of attempting to reframe anthrozoology as symbiotic ethics. The founding members of EASE had observed that the frequently anthropocentric focus of much extant anthrozoological work (e.g. that concerned with promoting interactions with other animals to benefit human health and wellbeing) risked perpetuating varying forms of objectification and instrumentalisation of otherthanhuman others. This was at odds with the multispecies and environmental turns elsewhere in the humanities and social sciences which sought more equitable focus and encouraged academic researchers to foreground the experiences and predicaments of animals other than humans as active stakeholders in multispecies interactions.

In establishing EASE we proposed that the multi-disciplinary field that is anthrozoology might benefit from an 'ethical intervention'. We seek to bring the 'science of human-animal relations' (Bradshaw, 2017) into more sustained and productive dialogue with debates around ethics and moral responsibilities which have been explored at length in traditional social science and humanities disciplines, as well as within more recently established fields such as environmental humanities (e.g. Rose et al., 2012) and critical animal studies (CAS) (e.g. Best, 2003; Taylor and Twine, 2014) in particular. Indeed, our approach has also been informed by the wider contextual, theoretical, and methodological landscapes of our respective 'home' disciplines (including anthropology, philosophy, psychology, sociology, and geography). In combination, this led us to argue that only by recognising the complex interplay of factors that influence interactions between individual organisms (including

humans) and acknowledging and valuing the individuality of participants in any relationship can we hope to adequately understand and represent the subjects of our research. Moreover, as a result of our personal experiences of living with and caring for other animals, grounded in the (now protected) belief in ethical veganism, we advocate for the importance of behaving in an ethical and sustainable manner in both professional and personal contexts. This approach is exemplified in some of the early work produced by individual founding EASE members (e.g. Hurn, 2012; Eason, 2019; Gröling, 2014; Calvert and Gröling, 2013; Badman-King, 2021), in addition to our collaborative contribution to the UK government's Environment, Food and Rural Affairs (EFRA) commons select committee - pre-legislative scrutiny on the UK's Animal Welfare (Sentencing and Recognition of Sentience) Bill (Hurn et al., 2017).

Consequently, the principal contention of the EASE working group was and continues to be that the recognition of other animals as ethically significant beings is both a necessary part of a sound understanding of human-animal interactions, and a moral imperative. Recognising other animals as ethically significant beings has implications for the way we approach anthrozoology, both as researchers and in the teaching and supervision of students on the MA and PhD programmes in Anthrozoology at the University of Exeter.

In addition to advocating for anthrozoology as an ethical pursuit, the EASE approach to anthrozoology as symbiotic ethics is based on the benefits of qualitative methodologies which can provide depth of knowledge and understanding of the lives of others. We also emphasise the importance of reflexivity, whereby researchers engage in critical scrutiny of their own values, agendas, backgrounds, identities, and any other factors which might play a role in the research process – from project design, through to data collection and analysis of findings.

In summary, our approach to anthrozoology as symbiotic ethics places emphasis on (i) an empathetic 'living with' (symbiosis) or alongside other animals. This 'living with' can be literal and physical, for example through co-habitation with companion animals, or more indirect, for example through ethical consumerism. When it comes to research, this 'living with' equates to an empathetic immersion (as far as practicable) in order to try and understand the lived experiences of other animals; (ii) a respect for other animals as autonomous subjects; (iii) an attempt to grasp, wherever possible, the perspectives of our

otherthanhuman as well as those of our human subjects, and (iv) a holistic understanding of the context within which interactions occur. As noted above, such aims are more in line with aspects of philosophical ethology, environmental humanities, and CAS. However, this is a deviation from the traditional emphasis within anthrozoology on quantitative research methods which more closely emulate the traditional scientific disciplines from which many anthrozoologists originate (e.g. animal behaviour science).

Finally, a fundamental premise of EASE is that (v) academic research concerned with understanding human-animal interactions should have some meaningful, practical application and ultimately improve the lives of ALL its research subjects, not just the human ones. Consequently, we propose that anthrozoology should be reframed to incorporate and promote what we have termed 'Symbiotic Ethics', to acknowledge the inextricable connections we share with other life forms at a time when our collective futures hang precariously in the balance.

The MA and PhD Anthrozoology programmes

When the distance learning MA in Anthrozoology was initially devised and launched by Professor Samantha Hurn (at the University of Wales in 2009 – it moved to the University of Exeter in 2012) it was the first of its kind and there were just six students on it. Enrolment has increased steadily over the years and at the time of writing there are 60 students on the programme, and close to 200 alumni, many of whom are using their anthrozoological knowledge to improve the lives of countless animals around the world in both their personal and professional lives. Not only that, the number of anthrozoology programmes available internationally has also grown almost exponentially in recent years, and we are delighted that many of these programmes are staffed by former and, in some cases, current students of the Exeter anthrozoology programmes.

The PhD Anthrozoology programme which was also devised and launched by Sam Hurn at the University of Exeter in 2012 also represented the first programme of its kind. In 2017, Fenella Eason, a founding member of the EASE working group, was the first person to be awarded a PhD specifically in anthrozoology (Eason, 2017; see Eason, 2019). Now the PhD

programme has 25 students currently enrolled, all doing exciting and ethically informed multispecies research.

Introducing the special issue

The first Anthrozoology as International Practice (AIP) student conference was an initiative devised and implemented by a team of students and alumni from the MA and PhD programmes in Anthrozoology at Exeter who were inspired by the aims and ethos of anthrozoology as symbiotic ethics as developed by the EASE founding members. They worked extremely hard to develop, promote, and host the conference, bringing together a diverse group of student and early career researchers working on anthrozoological topics around the world. The number of paper submissions received for AIP is another clear indicator of the burgeoning popularity of anthrozoology, and this really is something to be celebrated. During the conference, we held a workshop on publishing anthrozoological research and it became clear that while many students are producing excellent work, their student status is often a barrier to being able to publish. As a result, contributors were invited to submit their papers for inclusion in the first issue of the EASE Working Paper Series. We are excited by the breadth of topics, disciplinary perspectives, and ways of doing anthrozoology represented in this special issue which once again demonstrates both what an important field this is, as well as how diverse it has become. We are encouraged by how readily the next generation of anthrozoologists has embraced the ethical orientation advocated by EASE.

EASE working paper series next steps

Going forwards, the EASE Working Paper Series will provide a platform to exhibit the work of students and early career researchers working within the field of anthrozoology who engage with the EASE aims and ethos (either directly, through the adoption of the EASE approach to anthrozoology as symbiotic ethics in their work, or through constructive dialogue with the concept of anthrozoology as symbiotic ethics). The series will publish peer-reviewed collections of papers, including conference proceedings, thematic special issues, as well as a rolling stream of standalone papers. If you would like to propose a special issue or have a paper that speaks to the ethos of anthrozoology as symbiotic ethics, please contact the series

editors, Samantha Hurn (s.hurn@exeter.ac.uk) and Emily Stone (e.stone4@exeter.ac.uk). Please also refer to the EASE Working Paper Series guidelines when preparing your paper:

https://anthrozoologyassymbioticethics.wordpress.com/the-ease-working-paper-series/.

We also plan to publish a series of thematic issues showcasing the excellent work of students on the MA Anthrozoology programme. Upcoming issues will highlight a diverse range of topics emerging from the MA's modules, including Applied Anthrozoology which focuses on the practical application of anthrozoological knowledge in a range of contexts; Animal Criminology examining various conceptions of harm in relation to otherthanhuman animals and how they have featured in the socio-legal sphere as criminals, hazards, property and victims of abuse; Animal Ethics exploring ethical questions associated with human-animal interactions and nonhuman animal personhood; Animals, Health and Healing exploring human-animal interactions within the fields of science and medicine; Animal Mirror on representations of animality; Animals and Religion; Anthrozoology Residential; and Humans and Wildlife: Conflict and Conservation on human interactions with wild animals.

More information will be circulated about each special issue (both calls for upcoming issues as well as releases of new content) on the EASE website, the Anthrozoology as Symbiotic Ethics blog, and EASE social media (Facebook; Twitter) so please follow us to stay updated!

Series editors: Professor Samantha Hurn and Dr Emily Stone

Series editorial board: Dr Alexander Badman-King, Dr Fenella Eason, and Dr Jessica Gröling

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Special Edition Editors' Foreword

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AIP2021 Conference logo designed by Carolina Vitta

Anthrozoology as International Practice (AIP) Inaugural Conference

AIP was motivated by a desire to promote the EASE aims and mission statement (EASE, 2017; see also Badman-King, 2021) amongst emerging scholars. Postgraduate researchers from the Exeter Anthrozoology as Symbiotic Ethics (EASE) working group organised a virtual conference that brought together early-career researchers working at the intersections of human and animal relations. The conference aim was to spotlight research being undertaken by students around the world, in the hopes of building a global support network of like-minded individuals. The 2021 event attracted 147 registered attendees from 25 countries, and the programme included 22 oral presentations, 10 three-minute-thesis videos, and 8 posters. Papers varied widely across continents, disciplines, and species. It should be noted that while these contributors were early-career academics and researchers, many have a wealth of professional and life experiences that they brought to the table. Thus, each presenter contributed fresh perspectives and embodied experiences, and was encouraged to consider animals as ethically significant beings in line with the EASE aims and mission statement (EASE, 2017).

In addition to research presentations from early-career researchers, the conference included a keynote from Professor Samantha Hurn and two panel discussions: one on 'Careers in Anthrozoology' and another on 'Publishing Anthrozoological Research.' For

anthrozoologists, publishing our research is fundamental to 'bringing the animal' into mainstream academic thought and normalising the treatment of other animals with dignity and respect. Following the success of the conference, presenters and chairs were invited to submit papers for publication in this special inaugural issue of the EASE Working Papers Series.

Anthrozoology as International Practice (AIP) 2021 Working Papers

Grief and mourning within multispecies families

Our first contribution to this issue is Mourning Harold - A Play, developed from Scheidl's personal journal of grief and bereavement following the deaths of her beloved companion cats, Harold von Himmel (2013 – 2020) and Mitchell Scratch (2005 – 2020). The play is written in three acts centring on interspecies grief, loss, and mourning in the context of a cat-human family and includes a variety of voices and bodies. Scheidl's emotive piece shares the lived experiences of companion animal loss from both the human perspective and that of more-than-human family members.

Companion animal abandonment, readoption, and the welfare of shelter animals

Papers by Oxley Heaney, Blake, and Hladky-Krage each address different aspects of the complexity of human-companion animal relations in the context of shelter animal life. These issues look toward ways to improve the lives of individual cats and dogs affected by human actions, including abandonment and relinquishment. Oxley Heaney takes a grounded theory approach to understand the social factors underpinning cat abandonment in Saudi Arabia. These include a lack of animal welfare provisions and access to veterinary care, and a misguided belief that cats can be left for long periods or turned on the streets when a family is travelling or moves away. Oxley Heaney's paper draws on her experiences as a cat rescuer living in Saudi Arabia and highlights the plight of pedigree breeds and disabled cats who are abandoned. Papers by Blake and Hladky-Krage focus on dogs who live in animal shelters. Blake looks at ways to reduce stress in shelter dogs in the United Kingdom, which would not only improve the day-to-day lives of these individuals but also increase their chances of being adopted. Hladky-Krage in the United States explores how nose work can reduce stress and

improve the lives of dogs housed in animal shelters. This, in turn, may improve their chances of successful adoption, because, as Blake's paper explains, reduced stress leads to increased adoptability.

Interspecies relations and interactions

Much as they might wish to, not everyone is able to adopt a companion animal. Indeed, it would be irresponsible to rehome (or purchase) a companion animal whom you cannot responsibly take care of for the entirety of their lives. However, that does not stop many people from craving a connection with animals. Kim's paper looks at how young adults in South Korea engage with online companion animals. Known as 'Lan-cable butlers', these people engage with online profiles of real companion animals and purchase gifts for them and from them (via the human guardian who operates the profile). Drawing on ethnographic research and qualitative interviews, Kim examines these affective relationships and the growing significance of online animal profiles in the lives of young adults who cannot cohabit with companion animals.

Another way in which animals are accessible to people living in urban areas is the display of animals in zoos. But do zoo visitors and zoo animal caretakers recognise these animals as sentient beings with subjective minds? Augustin's contribution is based on an ethnographic study that explores animal subjectivity within a zoo setting, where she has gained extensive experience as a volunteer. Augustin finds that zoo employees, namely keepers, are more able to recognise subjectivity than visitors who have not developed intimate relations with these captive animals. The recognition that animals have subjective minds is a prerequisite for intersubjectivity and joint-meaning making — the basis of interspecies communication.

In an exploration of animal welfare, Spiegelhofer draws on interviews with animal welfare advocates who claim to have experienced interspecies dialogue. In her paper, Spiegelhofer maps intercultural communication theory to identify strategies for interspecies communication. By recognising animal others as individuals, the paper asserts that we can overcome species differences and anthropocentric ideas. However, Spiegelhofer concludes

by emphasising how the act of listening brings a moral responsibility of responding to animal others as articulate, sentient individuals.

Schneider's paper engages with how companion animal species are included or excluded from urban landscapes. Free-living animals who inhabit human-dominated spaces such as the post-human city invariably exist within human-defined social and political boundaries. Animals who step outside these boundaries are perceived as transgressive, and according to Schneider are only permitted to exist without persecution so long as they do not displease humans.

Animals used for human gain

In our third section, our authors explore the ways in which animals' bodies and lived experiences are subjected to anthropocentric control. In a variety of contexts, from animals in tourism to animals used in medical research, our authors grapple with the hierarchies of domination and control exerted over captive beings. In challenging the asymmetric power relationships typical in these scenarios, each author looks toward the interests of controlled animals. In so doing, our authors centralise animals to bring their predicaments into focus. Elephants who are 'employed' within the tourist industry are the focus of Madrid's paper, which looks at how volunteer tourists perceive the Elephants. Elephants were framed as needing 'saving by humans' but such conceptualisation is inherently anthropocentric. Madrid attempts to challenge this by advocating for the elephants' intrinsic value.

In other examples, animals are also overtly being used for human gain. Melancon's literature review is concerned with the welfare of donkeys used in animal-assisted interventions (AAI). This paper highlights how donkeys are not like horses and treating them as such is detrimental to donkey welfare.

Thomann examines researcher-lab animal relations and how 'the' laboratory animal is constructed within contemporary scientific research practices. Until such time as experimentation is abolished, Thomann argues the notion of the Animal Body Multiple strengthens the position of animals as ethically significant beings in science. But should researchers focus on the welfare of animals used (and abused) by humans as a pragmatic compromise, or only focus on the abolishment of institutions that use animals?

The papers described above highlight how animals are still very much used for human gain and raise the question of how much researchers can or should advocate on behalf of their otherthanhuman subjects and participants. In this volume's final paper, Szydlowski documents how her research position changed from that of a passive observer to becoming more of an advocate for her informants (both human and pachyderm). Szydlowski takes an autoethnographic approach to understand the liminal space she believes both herself as an anthrozoologist and her pachyderm research participants occupy.

All the authors in the special issue make valuable contributions towards reframing anthrozoology as symbiotic ethics, which acknowledges both 'the inextricable connections we share with other life forms', and our obligation to recognise all sentient animals as 'ethically significant beings' (EASE, 2017).

Author(s) biography and contact details

Kris(tine) Hill is a PhD candidate and member of the Exeter Anthrozoology as Symbiotic Ethics (EASE) working group. Her doctoral research focuses on cat-human relations within urban communities, and discourses surrounding free-roaming and free-living cats (*F. catus*). Kris started her adult life working within the equestrian industry, having left home and school at age 16 with no formal qualifications. She returned to education in her mid 20's and went on to complete a PhD in Plant Molecular Biology. As a scientist she has contributed to 26 peer-reviewed publications on the subject of plant development. Kris is now building the foundations of a new career – either as an academic, an educator, or a researcher within a non-profit organisation, dedicated to improving the lives of animals (including the humans who care for other animals). Kris serves as a volunteer communication officer for the Society for Companion Animal Studies (SCAS), which supports research into the human-companion animal bond and promotes best practices. She is particularly passionate about the issue of companion animals in rental accommodation and sheltered housing and believes no one should be forced to relinquish a beloved companion to avoid homelessness. You can read more about her academic and outreach projects here: https://katzenlife.wordpress.com/.

Jes Hooper is an Anthrozoology PhD candidate at the University of Exeter and a member of Exeter's Anthrozoology as Symbiotic Ethics (EASE) working group. Jes' doctoral research

focuses on trans-species relations and disappearance in the Anthropocene as explored through the lens of civet *(Viverrid)* species. Jes has published several academic works on the topic of human-civet relations including civet coffee production and authentication, civet coffee tourism, the rising phenomenon of civet companionship and Civet Lover communities, and the retribution killings of civets in response to the 2004 outbreak of severe acute respiratory syndrome (SARS). Jes has also co-authored several papers on the topics of animals in tourism, animal ethics, and media portrayals of animals during times of crises. Jes is the founding director of the Civet Project, a research initiative centred upon the aim to better understand human-civet relations. The Civet Project is currently involved in several transdisciplinary and transnational collaborative projects spanning the arts, humanities, and biological sciences, and is a founding partner of the Emerging Voices for Animals in Tourism initiative which has thus far culminated in a series of conferences and an edited book of the same name (estimated to be published in 2024). www.thecivetproject.com

Thomas Aiello is professor of history and Africana studies at Valdosta State University in Georgia, USA. He is the author of more than twenty books and dozens of peer-reviewed journal articles. His work helped amend the Louisiana constitution to make nonunanimous juries illegal and was cited in the United States Supreme Court as part of its decision ruling them unconstitutional. He holds PhDs in history and anthrozoology, and he also writes about the relationship between humans and animals, in particular the role of speciesism and human supremacy in creating vulnerabilities for nonhuman animals. He serves on the board of the Animals and Society Institute, the largest animal studies think tank in the United States. Learn more at www.thomasaiellobooks.com

Acknowledgements

We acknowledge all participants, presenters, and chairs for making the AIP2021 Student Conference such a success and contributing to the first edition of the EASE Working Paper Series. Thank you to all the anonymous reviewers for their time, patience, insight, and constructive feedback. Without them, this special edition would not be possible!

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Mourning Harold — The Play

Heidi Scheidl

Independent scholar (Portland, Oregon, United States)

Framed beside a personal art project, *Mourning Harold*, this play in three acts centres on the topic of interspecies grief, loss, and mourning in the context of a cat-human family. Dedicated to Harold von Himmel (2013 – 2020) and Mitchell Scratch (2005 – 2020), the play is composed of many voices and bodies, and covers topics such as spectrality, continuing bonds, and the policing, pathologising, and sanitisation of grief.

Keywords: human-animal relationships, companion animals, cats, grief, loss and mourning, art practice

Preface

This is not the paper I intended to write.

In the autumn of 2020, as an attempt to contend with trauma, I set to work producing a collection of multimedia and multisensorial art objects dedicated to, inspired by, and in veneration of my companion cats (*Felis catus*), Harold von Himmel (2013 – 2020) and Mitchell Scratch (2005 – 2020). The artefacts comprised of the collection entitled *Mourning Harold* are composed of various combinations of paper, glass, wax, inks, herbs, adhesives, and grief. You may view this catalogue by clicking on this link:

Mourning Harold Exhibition Catalogue

The paper in which I intended to write, entitled "Mourning Harold — Companion Animal Grief and Mourning Made Material," placed my art in conversation with scholars of anthrozoology, animal studies, and ethics to expand on grievability, embodiment, and materiality. My hypothesis: the ability to grieve expands out of the margins — becoming more vibrant and legitimate — once creative-discursive sites and materials are established, maintained, shared, and attended to as part of the everyday.

With a working hypothesis in hand, I dove headfirst into my research. Interestingly, the guiding quotes that led me to the above hypothesis continued to lead me in the document that will follow this preface.

> DeMello: 'Most animals … die never to be mourned, remembered, or even thought of again. They are simply lost to history' (2016: xix) and 'It is still far from publicly acceptable to openly grieve the deaths of dogs or cats, the most normative companion animals' (2016: xxiii).
>
> Desmond: 'For animal deaths grieved by humans, there are no such widely acknowledged conventions to be followed or contravened. Creative adaptation and critical innovation must take place' (2016: 241).

Attempts to write the paper that I was supposed to write did not work. I found myself purposely getting lost in subterranean holes and caverns, and the more I pushed myself to outline and execute my prescribed abstract, the more I lost desire to find and assemble a surface in which to hold my thoughts.

I took a few steps back, tried to forget what a proper paper is supposed to look like, and set to printing annotated quotes from my research onto copy paper. Wielding scissors, I cut up and scattered the words put forth by others like litter on my living room floor. After organising and reorganising scraps of captured words (by shoving them into envelopes, pouring them out, and sifting and resifting), I painted their backsides with rubber cement and adhered them to one another, sometimes out of order, and often to be cut up and re-masticated again. I slowly began to understand what it was that I was trying to cough up. The words became more workable once I realised the format, frame, vessel, box, or pan in which those words needed to be placed, covered, and uncovered was not an essay, but rather a play. (Apologies for the mixed metaphors, but such is the composition of a farce.)

The document before you is a grief play (three acts of alternating choruses and dialogues featuring minor and major discoveries in my work, revealing that which I sought to learn and unlearn) in the key of autotheoretical performance philosophy, released in the state and condition of animaladies (Gruen and Probyn-Rapsey, 2019a). With a mad-positive orientation, I deconstructed and examined my own self-regulated and self-enforced — formerly left untouched and unnoticed — policing, sanitation, and pathologisation of grief. I present to you, here, this play on grief that was written for me by my cats.

Mourning Harold

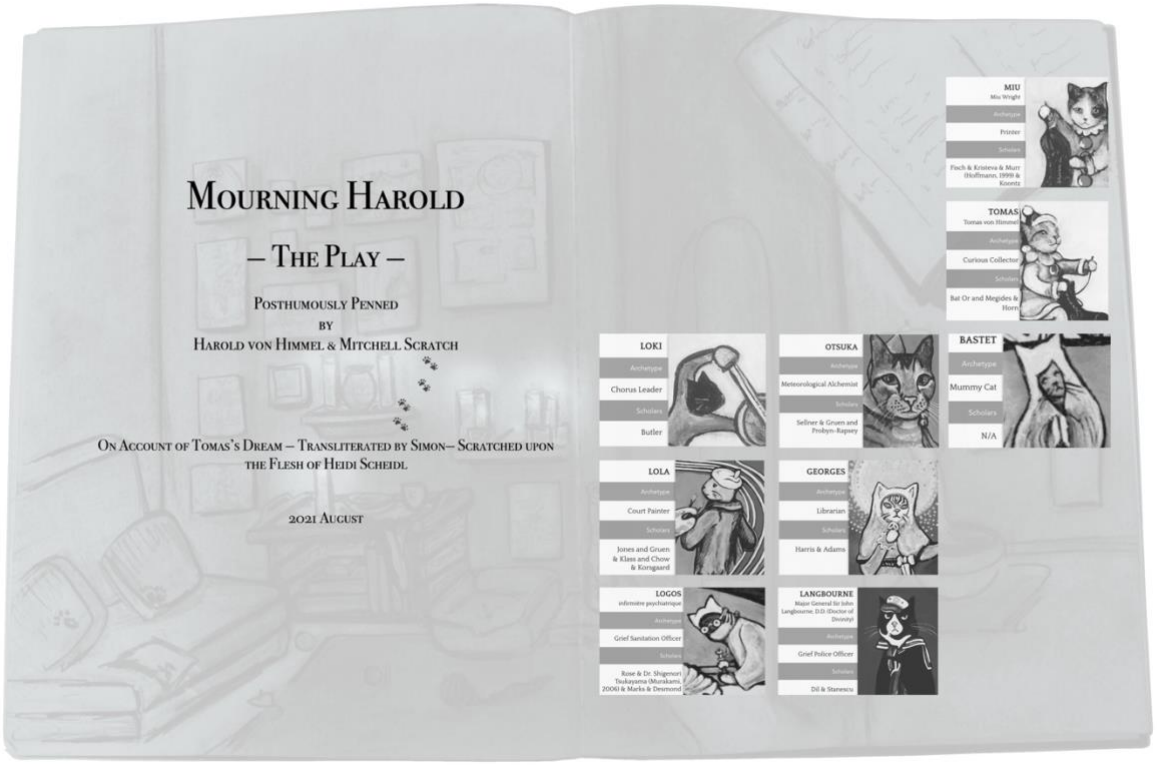
— The Play —

Posthumously Penned
by
Harold von Himmel & Mitchell Scratch

On Account of Tomas's Dream — Transliterated by Simon— Scratched upon the Flesh of Heidi Scheidl

2021 August

Dramatis Personae

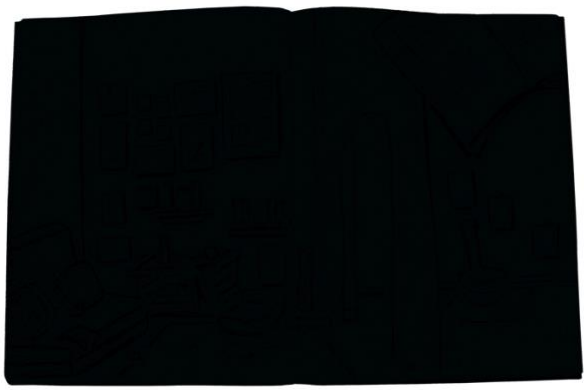


(*figure* 1)

The lights dim, the audience grows quiets. The curtains open with a sequence of thick ripping sounds — like an auditory form of an ellipse — signifying the curtain-puller is engaging in a struggle.

Act I. Scene 1(a). Spectrality

SCENE. *A room submerged in total darkness. A noticeable absence of smell. The air is still. Time is fractured in a collision between two consecutive bereavements.*



(*figure* 2)

Loki [*quietly and slowly*]. 'Who "am" I, without you?' (Butler, 2004: 22). [*An elongated and trailing resonance, severed from its original sound source and operating as an echo with a broken suffix, is followed by a moment of cold and dense silence*.]

Bastet. I am the Grieving Subject. Subjected to suffering. Enveloped in grief. Engaged in the task of mourning. [*A long pause is followed by a quiet sigh*.] I am simply one who has lost their others.

Langbourne. 'We are specter as we come to be haunted by those we mourn' (Stanescu, 2012: 577).

Georges. '[W]e have lost an intrinsic part of ourselves' (Harris, 2019: 74).

Langbourne. 'Those we mourn may have left, but they have not left us. And it is because we are haunted that we become also more ghostlike' (Stanescu, 2012: 577).

Loki. 'I think I have lost "you" only to discover that "I" have gone missing as well' (Butler, 2004: 22).

Langbourne. 'A part of you becomes unreal and ghostly' (Stanescu, 2012: 569).

Loki. '[W]hat I have lost "in" you, that for which I have no ready vocabulary, is a relationality that is composed neither exclusively of myself nor you, but is to be conceived as *the tie* by which those terms are differentiated and related' (Butler, 2004: 22).

Bastet. My ties remain. I will not let go.

Loki. 'The disorientation of grief—"Who have I become?" or, indeed, "What is left of me?" "What is it in the Other that I have lost?"—posits the "I" in the mode of unknowingness' (Butler, 2004: 30).

Bastet [*grievously*]. Loss has *thrown* me. My subject position, altered. [Bastet *sighs*.] I am a subject of grief. *Thrown* into grief, as words ending in *-ject* will do. [*Quietly but resolutely.*] I am the Grieving Subject [*trailing off into silence*].

Loki. '[O]ne undergoes something outside one's control and finds that one is beside oneself, not at one with oneself' (Butler, 2004: 28).

Bastet. I am torn. I am fragments strewn about in disarray. [*Hesitantly.*] I don't even know if I *want* to find a way to pull myself back together again. While I don't imagine that I have ever possessed a semblance of a whole, at this time, right now, I feel as if I have lost access to my disarray. Scattered pieces, shards, of myself. The fragments that I used to have. The scraps and threads that were once me. These have likely turned to ash and blown away. These pieces are irretrievable. And I don't even know which ones they were. [*Pause.*] I am here [*pause*] without a whole [*pause*] in a hole. [*Pause.*] Scattered.

Loki. '[M]aybe when we undergo what we do, something about who we are is revealed, something that delineates the ties we have to others, that shows us that these ties constitute what we are, ties or bonds that compose us' (Butler, 2004: 22).

Bastet. I have lost my others. My cats, my beloveds. My Mitchell Scratch. My Harold von Himmel. My family that once was, now a wound. [*Pause.*] My ties, a ball of yarn, unwound and entangled with trauma. Out of reach [*trails off into silence*].

Langbourne [*After a while*]. 'The beings whose lives are gone still continue with us when we mourn them. Their reality continues to impose itself on our reality; their existence continues on in our existence' (Stanescu, 2012: 577).

Bastet. Harold, Mitchell, and I. Our world, our culture, [*pause*] it was all [*pause*] co-constructed. All of that of which we had built has been altered and changed in this [*pause*] mutual undoing. Our imprint remains, [*resolutely*] and our *imprinting* must continue. They reside on the other side, while I am here [*pause*] on this side [*questioningly*] I *think*, at least. Material, corporeal, in this darkness. I ask not who 'I' am, but who or what will I become? Without you, my dear Miffs, and without you, my sweet Har. Much of what I once was is now [*pause*] cold and phantom. [*Pause*.] I turn from ice to vapor and back to ice again. [*Pause*.] Will I be able to express my love, commitment, honour, and respect to the next generation of my family? Will I be able to make them happy and fulfilled? In my present state and form, I ask: will we be able to imprint upon one another? [*A pause is followed by a hollowing silence: a void in the absence of a sigh.*]

Act I. Scene 1(b). Chorus. Spirit, in Fragments

SCENE. *Same as before. The* CHORUS *chants.*

(*figure* 3)

Miu. '[U]nable to sustain a state of disavowal' (Fisch, 2004: 369).

Loki. '[A]pprehending a mode of dispossession … fundamental to who I am' (Butler, 2004: 28).

Miu. '[I]nduced by a state of shock … deferred into the unconscious' (Fisch, 2004: 369).

Chanting disengaged.

Langbourne. '[R]endered as specter, spectral, and spectacle' (Stanescu, 2012: 577).

Loki. 'Perhaps mourning has to do with … *submitting* to a transformation' (Butler, 2004: 21).

Miu. 'In the journey to the "other side", the writer … slips outside the "fictional framework" of the everyday and engages the real' [*pause*] 'by disengaging what Freud called a stimulus barrier' (Fisch, 2004: 369-370).

Georges. '[T]ogether we can work for transformations' (Adams, 2019: 241).

A moment of silence is followed as a chilly wind, flowing from various directions, envelops the theatre.

The CHORUS *chants. The tone takes a more haunting form, the speed of diction slows, and internal-sentence pauses are given throughout.*

Lola. 'Loss is an aspect of love' (Jones and Gruen, 2016: 192).

Tomas. '[L]ooking for lost memories, some of them fragmented, split, and dissociative' (Bat Or and Megides, 2016: 23).

Lola. 'Death is an aspect of life' (Jones and Gruen, 2016: 192).

Logos. 'In life and death we are never alone, either as individuals or as species' (Rose, 2013: 2).

Lola. ‘[W]e construct ourselves through interactions with others’ (Jones and Gruen, 2016: 187).

Logos. ‘In accepting the great fact that life always comes after the deaths of others’ (Rose, 2013: 2).

Lola. ‘[R]elationships make us, death undoes us’ (Jones and Gruen, 2016: 188).

Logos. ‘[W]e understand ourselves to be in the shadow, and also in the debt, of those who came before’ (Rose, 2013: 2).

Lola. ‘[A]nimals are among the others with whom we are entangled. With them we coconstruct our selves’ (Jones and Gruen, 2016: 188).

Logos. ‘Without them we would not be alive’ (Rose, 2013: 2).

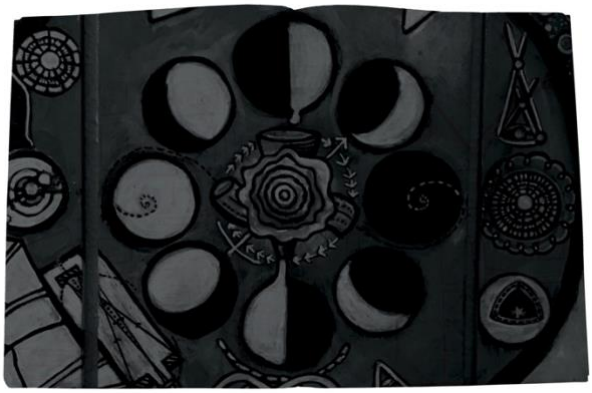
Tomas. ‘[F]eeling abandoned and disconnected’ (Bat Or and Megides, 2016: 16).

Lola. ‘When someone goes missing, we must find a way to keep their part of us alive’ (Jones and Gruen, 2016: 188).

Logos. ‘This shadow of the lives and deaths of all those who preceded us must also be understood as a multispecies shadow, immensely great and never fully knowable’ (Rose, 2013: 2).

Act I. Scene 1(c). Thick Ties in Thin Worlds

SCENE. *Same as before. The wind continues to flow, but only from right to left. The following dialogue is interrupted with sequences of distorted audio, sounding as if someone is tuning a radio to find a station with reception.*



(*figure* 4)

Langbourne [*following distorted audio*]. '[I]t is only if we mourn that we can start building against so much loss and devastation' (Stanescu, 2012: 581). [*Distorted audio.*]

Lola. 'In some cultures, continuing bonds are important and pervasive' (Klass and Chow, 2011: 346).

Logos. 'The term "spirit projection" sprang to mind' (Murakami, 2006: 67).

Otsuka. '[A]ncient Celtic druids and druidesses knew from first hand experience of the mystical connection between humans and animals. Animals, in fact, were considered by them as "helping spirits" who guided not only the spiritual leaders of the tribes, but also ordinary people through life's conflicts and difficulties, sometimes helping them attain a new direction in life, a new identity. Certain animals were seen as *psychopomps*, spiritual guides for the living, but also guides of souls to the place of the dead' (Sellner, 2020: 7-8).

Lola. 'In traditional Japanese ancestor rituals, bonds with the dead are a normal part of everyday life. In common speech, the dead are in *ano yo* ("that world") as opposed to *kono yo* ("this world"). The dead pass easily from one world to another. They are both there and here' (Klass and Chow, 2011: 346).

Otsuka. 'For both the living and the dead, an animal could provide very real contact with and direction to the spiritual world, manifest in the Celts' belief in "thin places," geographical sites where a person could experience "the thin veil" between this world and the next' (Sellner, 2020: 8).

Logos. In May 1946, in the interview of Doctor Shigenori Tsukayama, from the 'Report on the Rice Bowl Hill Incident' (Murakami, 2006: 61), the following was noted: 'Japanese folktales are full of this sort of thing, where the soul temporarily leaves the body and goes off a great distance to take care of some vital task and then returns to reunite with the body. The sort of vengeful spirits that populate *The Tale of Genji* may be something similar. The notion of the soul is not just leaving the body at death but—assuming the will is strong enough—also being able to separate from the body of the living is probably an idea that took root in Japan in

ancient times. Of course there's no scientific proof of this, and I hesitate to even raise the idea' (67). [*Distorted audio.*]

Langbourne. 'Mourning is a testament to such a shared embodiment, which is the source of its paradoxical productivity' (Stanescu, 2012: 578). [*Distorted audio, followed by fizzling out into silence.*]

[*End* Scene]

Act I. Scene 2(a). Objects of Grief

SCENE. *Same as before, a room submerged in total darkness. The subtle and minty aroma of catnip gently wafts through the air. The wind has slowed, it is November.* Tomas *enters stage left, with sounds of dissonant clamour — disrupting the quiet of the theatre. Bumping into and tripping on objects of various material compositions,* Tomas *makes sounds of sudden-but-minor accidental pains accumulated but pays it no mind. Continually, but slowly,* Tomas *tears through the mess. The sound of a strike of a match. Five candles are lit, one by one. The flow of air slows to a uniform pace and the theatre's temperature warms.* Tomas *finds* Miu *and* Otsuka *seated on the floor, with backs against the wall, centre stage.*

(*figure* 5)

Tomas. Hello there! Has anyone seen the Grieving Subject?

Miu. She is over there, [*pointing toward stage right.* Bastet *is present, but not seen, due to being obscured by a dark shadow.* Bastet *is lying on a table wrapped in a shroud composed of toilet paper*.] She appears to be either sleeping or [*with uncertainty*] possibly catatonic.

Otsuka. Our shadow, our Grieving Subject, has taken temporary leave to the other side. As we engage in our griefwork, on this side, [*pause*] grief perspires from our skin. With grief as material, resource, practice, and purpose, we carve out a space, a secular-sacred shrine, a cenotaph, a place setting for grief: The Harold von Himmel Memorial Shrine & Garden — Designed and Curated by Mitchell Scratch.

(*figure*. 6)

Tomas. While we are sitting with our grief, [Tomas *sits beside* Otsuka], might we obtain some objects in which to hold? Objects of Grief, perhaps? If we figure out a way to place our grief into

objects, the Grieving Subject might have something to hold, to be with; something that might establish a sense of belonging in, or an adherence to, the states and conditions of grief.

Miu. Might I interrupt? How exactly will grief become interred within tangible objects?

Otsuka. By way of sublimation. The undone, dispossessed, disoriented Grieving Subject consciously directs their internalised emotional state into their hands; hands, made to reflect the atmospheric conditions in which are internal; hands, holding the object intended to become a vessel. Diving into their grief, in a state of deep concentration, an invitation is submitted: a request for transformations. Internal grief-ether is repositioned as, or transferred to, external grief-matter.

Miu. If grief can be distilled, externalised, and placed outside of the self and into an object, might that restore some sort of control or [*pause*] agency for the Grieving Subject?

Otsuka. Perhaps a *notion* of a possibility. However, neither gaining control nor agentive restoration are our goals. Instead, the aim is to open spaces for chance and change to take place, inviting conditions conducive to fluidity and flux, channelling intermediary media between form and formlessness.

Tomas. So, we are to manipulate, manufacture, and craft objects in which grief may be filled. Crossing the material with the symbolic to produce relics representative of relationality. Attending to adherence, to our familial cats we deliver our devotion and posthumous care. Grief is made to matter. Physically. Materially. Spiritually. Emotionally. Objects of Grief will continually demand our attention and care.

Miu. When grief-ether is sublimated into grief-matter, is grief removed or released from the Grieving Subject?

Otsuka. Neither released nor removed. Instead, grief is provided ample space to belong, circulate, and continue in its roaming expanse. Objects of Grief are made to coexist in the Grieving Subject's everyday life. The sublimation of grief is followed by way of a deposition.

Miu. What is involved in the deposition?

Otsuka. The Grieving Subject holds, gazes, sniffs, listens, theorises, or thinks with, upon, and about the Object of Grief, thereby inviting it to activate, animate, and participate in acts of grieving, implicitly or explicitly. With thoughts and senses directed upon the ties in which the Grieving Subject refuses to let go, grief-matter transitions to grief-ether and reincorporates itself back into the interior.

Tomas. Objects of Grief are vessels in which grief may be siphoned from. Sacred and ubiquitous objects *for* and *of* everyday use. Continuous flows of grief may be established, consumed, produced, and passed. Grief is provided a permanent residency. Perhaps this might produce a vibrant, multimodal, and complex form of grief for which the Grieving Subject may interact.

Otsuka. For best results, sublimation and deposition should occur on a continuum. However, it must be noted: some Objects of Grief may be constructed and then not utilised. Additionally, objects not intended to function as Objects of Grief may operate as such on their own accord.

Tomas. A grief that knows no bounds and no ends. A grief made to matter. A vibrant grief. Grief left incomplete and unresolved.

Miu. What are our roles? What should we do?

Tomas. I will locate and procure materials, items, information, and tools. Miu, you might begin your work in relief and engraving, printing, and glue-making. Holding objects in your hands, directing tools, manipulating materials and substances, and making marks upon the surfaces and interiors of objects that will then inter our grief.

Curtains close.

Act I. Scene 2(b). Chorus. Affective Archival Matter

SCENE. *Behind closed curtains, the* CHORUS *chants.*

(*figure* 7)

Logos. ‘When the verbal and visual archives are silent’ (Marks, 2000: 76).

Otsuka. ‘[T]he sadness, the anguish, the pain’ (Gruen and Probyn-Rapsey, 2019b: 6).

Georges. ‘[C]ontinues to haunt the narrative space’ (Harris, 2019: 187).

Miu. ‘Material memories … a tangible object’ (Koontz, 2019: 54).

Logos. ‘[I]nformation is revealed that was never verbal or visual to begin with’ (Marks, 2000: 76).

Tomas. ‘[A] space in which subjective association might be elicited’ (Bat Or and Megides, 2016:18).

Logos. ‘[A]n object changes as it circulates in new contexts’ (Marks, 2000, 79).

Lola. ‘[P]ains that last forever’ (Korsgaard, 2018: 166).

Otsuka. ‘[S]een and heard and felt’ (Gruen and Probyn-Rapsey, 2019b: 6).

Tomas. ‘[C]ases of trauma and loss’ (Bat Or and Megides, 2016: 23).

Logos. ‘[C]ondense time within themselves’ (Marks, 2000: 77).

Tomas. ‘[T]he fragmented and the integrated’ (Bat Or and Megides, 2016: 23).

Logos. ‘[K]nowledge … stored only in the memory of the body’ (Marks, 2000: 76).

Tomas. ‘[T]he lost and the found’ (Bat Or and Megides, 2016: 23).

Logos. ‘[E]ncoded in objects … through physical contact’ (Marks, 2000: 80).

Otsuka. ‘[H]elps us to re-member’ (Gruen and Probyn-Rapsey, 2019b: 6).

Logos. ‘[A]n object changes as it circulates in new contexts’ (Marks, 2000: 79).

Tomas. ‘[T]he reconstruction of meaning’ (Bat Or and Megides, 2016: 23).

Tomas. ‘[T]he real into the potential space’ (Bat Or and Megides, 2016: 7).

Logos. ‘[N]ot simple acts of displacement’ (Marks, 2000: 76).

Miu. ‘[M]ultiple sensations across sensory spheres’ (Koontz, 2019: 60).

Logos. ‘[T]hrough physical contact’ (Marks, 2000: 80).

Tomas. ‘[T]he real into the status of a symbol’ (Bat Or and Megides, 2016: 7).

Miu. ‘Material memories … a tangible object’ (Koontz, 2019: 54).

Tomas. ‘[L]oaded with emotional content’ (Bat Or and Megides, 2016: 16).

Logos. ‘[H]olding on to artifacts’ (Marks, 2000: 5).

Tomas. ‘[T]he controlled and the accidental’ (Bat Or and Megides, 2016: 23).

Logos. ‘[T]o coax the memories from them’ (Marks, 2000: 5).

Tomas. ‘[T]he rebuilding of hope and sense of agency’ (Bat Or and Megides, 2016: 23).

Logos. ‘[I]n excavating …we expand outward in time’ (Marks, 2000: 77).

Lola. ‘[W]e must admit that pain is part of the good’ (Korsgaard, 2018: 167).

Logos. ‘[A]n object changes as it circulates in new contexts’ (Marks, 2000: 79).

[*End* Act] *Curtains open.*

Act II. Scene 1(a). Enter the Grief Police

SCENE. *It is December.* Tomas *and* Miu *are in two locations at once. First location: in a room, same as before — but now taking on a bold blue tone — with stage left functioning outside of the shadows, while on stage right,* Bastet *continues to lie on the table, as before — wrapped in a shroud composed of toilet paper — obscured in the darkness. Second location: on the second floor of Pacific Northwest College of Art, in the hallway known as the Design Corridor.*

(*figures* 8-9)

Tomas. A jar holds the potential to be filled with infinitesimal things. It can live almost anywhere, and may experience numerous births, deaths, and rebirths.

Miu. This jar made its way outdoors where I altered it with a rotary tool. I intended for the jar to be a practice space for engraving. I scratched a representation of Harold onto the jar's exterior, liked the result, so my engraving practice space began its transformation into this secular-sacred space, this reliquary, this container that holds relics. I moved the jar back indoors and I brushed it with paints.

Tomas. I filled the jar with objects that held significance to Harold. Including these little spools of thread, the kind that come in a great assortment of colours and hold a variety of uses, namely, so that any stitch, hem — or even a button that might need to be reattached to a piece of clothes or some other material — will have thread to nearly, or closely match, the material being sewn. I topped this all off with our highly significant, heavy with grief, segment taken from the ball of yarn. The one that was wound and unwound countlessly by the Grieving Subject during the first month that followed the tragedy.

Miu. When it's not on display, as it is here, the Pickle Jar Reliquary resides in our bedroom, on the nightstand, and we see it every time we go to sleep, have a meal, or take a rest.

Tomas. If the Object of Grief operates on a continuum, it may allow a joining, connecting, and following of grief. It might produce a continuous spread, an extension, or an extended period of grief. Grief is made to matter. Vibrant and without bounds. But I wonder, is the aim of this project to eventually resolve our grief and move on?

Miu. No, quite the opposite. We are not making a resolution for grief. What began as a project took on a new state, it became a practice. It's something we do every day, like eating, sleeping, going to the bathroom, and cleaning the litter box.

Tomas. Unresolved, undecided, and uncertain. So, we keep the door open?

Miu. Yes. I imagine our grievability — our ability to grieve — will increase as we continue to refine our practice.

A high pitched-whistle sounds. Enter Langbourne.

Langbourne. Halt! Grief Police, here. [*Motions to* Bastet.] Who is that over there?

Tomas. That is Bastet, she is the Grieving Subject.

Langbourne. Why isn't she moving? Is she sleeping? She can't be here laying there like that. This is a public venue. There will be no sleeping happening on my watch.

Miu. Bastet is not sleeping, she's catatonic. Wait a moment, [*speaking to* Tomas], have you received any word from Otsuka?

Tomas. Yes, Otsuka said that The Grieving Subject is pathognomic. Her body is corpulent with grief as she wanders and searches for her Others in the folds and rolls of her ball of yarn, continually and consistently filling herself with raw grief to then fill our Objects of Grief. She makes many sacrifices: corporeal movements: still — shadow: severed — spirit: split — cognisance: paused — voice: silent. These self-objects: vacant. These operations: in stasis. All remain out of reach. The outcomes: spectral, unknowable. Nevertheless, she continues to roam on the other side while her transformations lie in wait.

Langbourne. You're going to have to move her. She can't sleep here. Wait a minute. [*Backtracks*.] Did I hear you say you're planning on holding on to your grief and continuing your bond with the dead? You're supposed to let those go.

A low rumbling sound followed by the dinging of a bell signals an abrupt interruption in the performance.

Curtains close.

Act II. Scene 1(b). Chorus. War Bonds

SCENE. *Behind closed curtains, the* CHORUS *chants.*

(*figure*. 10)

Lola. ‘Over the course of the 20th century, the American and Western European’ (Klass and Chow, 2011: 347).

Logos. ‘[H]egemonic ideology’ (Desmond, 2016: 240).

Lola. ‘[P]opular and professional cultural grief guidelines changed’ (Klass and Chow, 2011: 347).

Logos. ‘[B]eliefs so entrenched as to appear invisible’ (Desmond, 2016: 240).

Lola. ‘[F]rom an emphasis on continuing bonds’ (Klass and Chow, 2011: 347).

Logos. ‘“[T]he way things should be”’ (Desmond, 2016: 240).

Lola. ‘[T]o breaking bonds’ (Klass and Chow, 2011: 347).

Logos. ‘“[J]ust the way things are”’ (Desmond, 2016: 240).

Lola. ‘[A]nd then back to continuing bonds’ (Klass and Chow, 2011: 347).

Logos. ‘[A]bove all, at least implicitly, they ask us to imagine differently’ (Desmond, 2016: 240).

Tomas. ‘At the end of the eighteenth century’ (Horn, 2018: 3).

Lola. ‘[I]n the Victorian period’ (Klass and Chow, 2011: 347).

Tomas. ‘“[S]ecular relics” began to proliferate’ (Horn, 2018: 3).

Miu. Tomcat Murr writes: ‘Clinging firmly to each other and tumbling head over heels again and again’ (Hoffmann, 1999: 47).

Lola. ‘[E]laborate mourning customs channeled the sentimental attachment’ (Klass and Chow, 2011: 347).

Georges. ‘There is a pageantry to their commemoration’ (Harris, 2019: 186).

Otsuka. ‘Allowing the sadness, the anguish, the pain to be seen and heard and felt’ (Gruen and Probyn-Rapsey, 2019b: 6).

Miu. Tomcat Murr articulates: ‘[T]his meeting of fine souls, this mutual recognition’ (Hoffmann, 1999: 47).

Lola. ‘[B]etween the living and the dead’ (Klass and Chow, 2011: 347).

Miu. Tomcat Murr commits to say: ‘[W]e swore vows of tender faith and friendship’ (Hoffmann, 1999: 47).

Otsuka. ‘[H]elps us to re-member’ (Gruen and Probyn-Rapsey, 2019b: 6).

CHORUS [*all together*]. ‘[A]n object changes as it circulates in new contexts’ (Marks, 2000: 79).

Lola. ‘The mass deaths of the First World War overwhelmed Victorian ideals’ (Klass and Chow, 2011: 347).

Miu. Tomcat Murr discloses: ‘[O]ur flights are often impeded by leaden weights’ (Hoffmann,1999: 78).

Loki. ‘[A]t the expense of every other human consideration’ (Butler, 2004: 30).

Lola. ‘[T]he goal of grief’ (Klass and Chow, 2011: 347).

Loki. ‘[T]o banish it’ (Butler, 2004: 30).

Langbourne. ‘[D]esires for immunity and atomistic individualism’ (Stanescu, 2012: 579).

Loki. ‘[E]radicate one of the most important resources’ (Butler, 2004: 30).

Lola. ‘[R]econstitute the autonomous individual’ (Klass and Chow, 2011: 347).

Loki. ‘[M]ake ourselves secure’ (Butler, 2004: 30).

Langbourne. ‘[S]ee feminized labor as cut off from the *bios* of society’ (Stanescu, 2012: 578).

Loki. ‘[F]oreclose that vulnerability’ (Butler, 2004: 30).

Otsuka. ‘[M]aintain the reason/emotion, mind/body divide’ (Gruen and Probyn-Rapsey, 2019b: 6).

Lola. ‘[A]daptation to the changed social environment’ (Klass and Chow, 2011: 347).

Miu. Tomcat Murr submits, we are: ‘[O]bliged to follow that bad example’ (Hoffmann,1999: 79).

Lola. ‘As the war ended, grief began to be regarded’ (Klass and Chow, 2011: 347).

Langbourne. ‘[A]s private and unpolitical’ (Stanescu, 2012: 578).

Lola. ‘[A]n individual interior process’ (Klass and Chow, 2011: 347).

Langbourne. ‘[A]n erasure of existence’ (Stanescu, 2012: 579).

Lola. ‘[A]n internal psychological process’ (Klass and Chow, 2011: 347).

Langbourne. ‘[I]n the closet’ (Stanescu, 2012: 578).

Otsuka. ‘Cloaking emotion’ (Gruen and Probyn-Rapsey, 2019b: 6).

Langbourne. ‘[A]n erasure of sense’ (Stanescu, 2012: 579).

Otsuka. ‘To separate emotion from reason once and for all’ (Gruen and Probyn-Rapsey, 2019b: 4).

Lola. ‘[C]ontinuing bonds’ (Klass and Chow, 2011: 347).

Langbourne. ‘[M]ourning at home’ (Stanescu, 2012: 578).

Lola. ‘[R]estricted to the private sphere’ (Klass and Chow, 2011: 347).

Loki. ‘[W]e must take our bearings and find our way’ (Butler, 2004: 30).

Lola. ‘[W]ith few social customs to support it’ (Klass and Chow, 2011: 347).

Langbourne. ‘[A]n erasure of relations’ (Stanescu, 2012: 579).

Lola. ‘[G]rief remains’ (Klass and Chow, 2011: 347).

Langbourne. ‘[P]racticing disavowal’ (Stanescu, 2012: 580).

CHORUS [*all together*]. ‘[A]n object changes as it circulates in new contexts’ (Marks, 2000: 79).

Curtains open. [*End* Scene]

Act II. Scene 2(a). Grief Citation

SCENE. *The same conditions of* Act II. Scene 1(a)*, except that* Langbourne *now holds a long and pointed stick.*

(*figures* 11-12)

Miu. I'm sorry, what was that you said?

Langbourne. Are you even listening to me? I said you need to move the body [*pointing the stick at* Bastet*, stage right*]. So, [*tapping the stick on the ground*], what is this I hear about your plan? Did I hear you say you're planning to hold on to your grief — in an externalised material form? Did I hear you're planning to continue your bond with the dead — in the public sphere?

Miu. Oh, yes. Grief wants to take up space. We need to give ourselves time and space to allow grief's movement, flow, and expanse.

Tomas. Grief is to be engaged with both *inside* and *outside* of the body — as well as *inside* and *outside* of the privacy of one's home. Grief must be taken care of and cherished. Therefore, grief should be exposed to and shared with oneself and others.

Langbourne. Shared with others? [*Scoffs and emits a short snort*.] Grief is contagious! Don't spread your grief. We don't want it. It's disorderly. We have enough of our own! You need to put your grief in the shadows, a closet, or a carefully locked case. Only let it out when it's at the appropriate time, in appropriate places, and with the appropriate audience. I will refer you to a therapist, a hotline, and a support group.

Miu. No, thank you. We will take care of our grief in our own way.

Tomas. You want us to put our grief in a shadow? I think grief is an integral part of us, as in a part of the body, a body part, embodied. Like the lungs, the pancreas, and the Islets of Langerhans. Grief is not a separate entity and does not live in a vacuum. Grief must be collaborative to function. Even if we don't address our grief explicitly, or are privy to grief's happenings, states of being, or presence within, grief is always already both inside and outside of us all, everywhere, and always. You cannot put your grief in the shadow as you cannot put your pancreas in your pocket or leave your lungs at home when you go out for a walk. But, I think, you could probably make grief into one of your shadow-selves.

Miu. Wait, what is the shadow-self?

Tomas. I'm not entirely certain, but I've read that 'The shadow is that part of ourselves which is least socially acceptable' (Dil, 2007: 60) and that 'the easiest ways to recognise our shadow,' according to Jung, is 'to become conscious of the ways we project it onto others' (61).

Langbourne. I have some advice to give to you — maybe you haven't encountered these phrases, but they're common sense, reasonable, and therefore rational and true — 'leave your troubles at home' [*citation needed*] and 'fake it 'til you make it' [*citation needed*]. These methods are tried and true. Don't be weak. You should be ashamed of yourself. Where are your bootstraps? As a citizen of the United States of America, you should have been issued a pair in your Social Security Identification packet.

Miu. Grief must be attended to in its own way, in whatever form, presentation, or condition in which is desired.

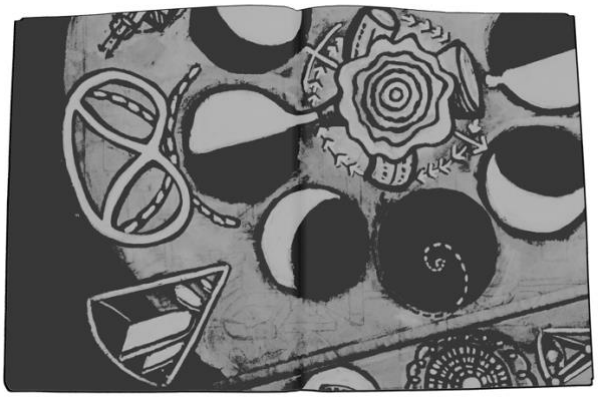
Tomas. Grief does what grief will do. We use our straps as toys.

Langbourne. Absolutely not. This is unacceptable. These activities constitute grief's unauthorised and unsanctioned use — and therefore — abuse. [*Irate and taking an extra-authoritative tone.*] I'm issuing you a ticket, with an additional warning posted to your permanent record to indicate you are to be named as suspect for perpetrating future acts of subversion. With this warning in place, your subsequent fines — and judgements — will be increased — and you are hereby revoked of any rights to make appeals for any subsequent grief-related infractions you acquire hereafter. This is a fine, you must pay this fine, and you must do your due diligence to resolve your grief. For this offence, you are required to report to the Grief Sanitation Office, formerly known as the Grief Sanatorium, at the Department of Interior's Institute of Grief. [*In recitation.*] If you do not appear before a Grief Processing Agent within four business days, your fine will double for each day thereafter. If, two weeks have passed from the time stamped on this citation — including weekends — with no receipt of your cooperation, a warrant will be issued for your arrest. You will be held without bail and a court date will be set. You will appear before a judge — who after determining the content and context of your violation — will set the appropriate duration for which you will be incarcerated. [*Cease recitation.*] And [*pointing at* Bastet], remove this body at once!

Curtains close.

Act II. Scene 2(b). Chorus. Cathexis or Capital G

Behind closed curtains, the CHORUS *chants.*



(*figure* 13)

Logos. '[M]ovement among cultures, like the passage of time' (Marks, 2000: 77).

Otsuka. '[D]rew upon the rich oral tradition' (Sellner, 2020: 23).

Tomas. '[P]ostulated by Freud' (Horn, 2018: 30).

Logos. '[T]he frustrated search for identity' (Marks, 2000: 4).

Tomas. '[A] loving attachment (cathexis)' (Horn, 2018: 29).

Logos. '[H]as compelled a turn to history' (Marks, 2000: 4).

Miu. '[R]epresentations germane to affects' (Kristeva 1989: 21-22).

Langbourne. '[T]he investment of psychic energy' (Dil, 2007: 98).

Lola. '[B]onds to the dead' (Klass and Chow, 2011: 347).

Tomas. '[L]ibidinal energy' (Horn, 2018: 29).

Miu. '[N]ot simply raw energies' (Kristeva 1989: 22).

Tomas. '[O]ngoing attachment with the deceased' (Horn, 2018: 30).

Lola. ‘The idea of “decathexis”’ (Klass and Chow, 2011: 347).

Miu. ‘[E]nergy disruptions’ (Kristeva 1989: 22).

Lola. ‘[A]rticulated by Freud’ (Klass and Chow, 2011: 347).

Tomas. ‘[H]eld in the hand or traced by the eye’ (Horn, 2018: 4).

Lola. ‘[B]onds to the dead served no healthy psychological purpose’ (Klass and Chow, 2011: 347).

Miu. ‘[M]oods are *inscriptions*’ (Kristeva 1989: 22).

Tomas. ‘[S]piritual, behavioural and somatic’ (Horn, 2018: 6).

Miu. ‘[*F*]*luctuating* energy cathexes’ (Kristeva 1989: 22).

Lola. ‘[S]ever bonds with the dead’ (Klass and Chow, 2011: 347).

Miu. ‘[N]otably sadness’ (Kristeva 1989: 22).

Lola. ‘“[D]ecathexis”’ (Klass and Chow, 2011: 347).

Tomas. ‘To complete the mourning process successfully’ (Horn, 2018: 29).

Georges. ‘[W]e aren’t going to have closure’ (Adams, 2019: 241).

Lola. ‘[W]ithdrawing emotional energy’ (Klass and Chow, 2011: 347).

Logos. ‘[M]aterial interactions’ (Marks, 2000: 80).

Tomas. ‘[O]ngoing attachment with the deceased’ (Horn, 2018: 30).

Georges. ‘[N]o narrative will find its “finis”’ (Adams, 2019: 241).

[*End* Act] *Curtains open.*

Act III. Scene 1(a). Grief Sanatorium

SCENE. *It is December, four days after* Act II. Scene 2(a). Grief Citation. *The room, as before, is now dressed in drab lighting and is operating as the proxy for the Grief Sanitation Office, formerly known as the Grief Sanatorium, at the Department of Interior's Institute of Grief.* Logos, *playing the role of the Grief Processing Agent, is located centre stage, seated on the rug close to the arched door where a baby-gate has been fastened to prevent movement to-and-fro the separated spaces.* Tomas *and* Miu *enter stage right, sit on the floor of the waiting room — beside the litter box — and wait to be summoned. Some time passes. They are called upon and proceed to the baby-gate — to greet* Logos.

(*figure* 14)

Logos. Welcome to the Sanatorium, ahem [*correcting*] Sanitation Office of the Institute of Grief. I'll be helping you clean up your grief today. May I have your official citation, please? [*Takes the citation from* Tomas *and attempts to insert the thin receipt paper into a machine, fails, huffs, and inputs the data manually.*] Yes, your grief must be resolved. Good news! Resolve is what we're here for. It appears that the authorities made a resolute decision regarding what you must do with your grief. Let me see here. You are in violation of code 45-122-777 stroke 9b, 67f, and 129y; that's mishandling of grief in the fourth degree, including public exposure of grievous emotions and materialisation of grief, exhibiting visible forms of grief including publicising a continuation of bonds with the deceased, and having intent to distribute and influence others in grieving and continuing bonds in the public sphere. These are clear violations, blatant disregards of social order, and potentially hazardous waste-related accidents lying in wait. Before I go over your options, I am required to input a statement from you.

Tomas. To be with grief — both inside and outside, to be there for others in their times of deep sorrow and loss — we need to learn how to give grief a home, some space, some time, some objects, some bodies, and some pieces of mind.

Miu. We made a place to sit with and in our grief and we opened ourselves to share and submit. Now we continually wind and unwind the ties that constitute us, ties that cannot be undone or torn apart. We hold on to our grief and our ties. We avow and allow a continual submission and we do not seek to halt in our transformations.

Logos. Okay, I'll just put 'other reasons.' Let's see here. You have several options for cleaning up your grief. Might I suggest our most popular option: melted grief. Grief passes from a solid to liquid state at recommended temperatures, temperaments, and precise intervals of time. In five straight-forward, clearly defined steps, grief is processed and placed into a state of resolve.

Tomas. Resolve: a firm, fixed, and determined thing. Resolved grief. How is melted grief resolved? Melted substance is not firm.

Logos. It's resolved as is a resolution. As in an act to be determined and set to motion. Let's resolve to do something simple, to break a task into smaller parts for ease of management or processing. If melting isn't your preference, you may try condensed. Here you will significantly shorten the time and experience of grief by segmenting emotions into essential entities — anger is only anger, sadness is only sadness, no contradictions, no mixed emotions. Then you place these discrete units of emotion into seven organised steps and clearly defined processes. You complete, release, and submit your grief within two business days. Condensed grief is an in-patient-only option due to the potentially volatile emotional outbursts that may erupt in the phase between sadness and anger. If you choose this option, you will be placed under the care of our expert staff here at the Institute of Grief.

Tomas [*reciting in unison, with* Loki *from behind the curtain*]. 'One cannot say, "Oh, I'll go through loss this way, and that will be the result, and I'll apply myself to the task, and I'll endeavor to achieve the resolution of grief that is before me"' (Butler, 2004: 21).

Logos. Oh, yes, [*sighs*] the theorist that talks about grievability. Like grief, resolve, too, is an ability. To function in society, you must attain a resolvability of grief: it's the ability to fix, determine, and decide on grief's upcoming placement and position; that is, either you finish it quickly, erase it, or cover it up. And most certainly, under no circumstances, do you let it out of your house unless you are physically located in a grief-sanctioned establishment.

Miu. What about residual un-processed grief? It might evaporate and form drop of dew. Droplets may join up and create puddles. Puddles of unresolvable grief in which we might periodically slip on and fall unexpectedly.

Logos. You are to be positive and focused on life. You must hope for clear skies and dry land. You must learn ways to control and contain yourself. Do not cross boundaries, they are marked for a reason.

Tomas [*reciting in unison, with* Loki *from behind the curtain*]. 'I think one is hit by waves, and that one starts out the day with an aim, a project, a plan, and finds oneself foiled. One finds oneself fallen. One is exhausted but does not know why' (Butler, 2004: 21).

Miu. What if the puddle remains, and other stressors enter to break open those bounds? Oops, I slipped on my grief. I'm sorry I attacked you, I misplaced my mop so I cannot clean up the spill.

Tomas. Resolve, a task: to melt, dissolve, loosen, untie, unyoke, and relax. To untangle, release, set it free, and explain it away.

Logos. Another option: Freeze Grief. Zip up your grief in a plastic bag, shove it in the back of your freezer, and save the tasks of mourning for a later date. You will put on a mask, work to forget, and distract yourself.

Miu. Everything that is stored must be opened by somebody eventually, right? If I labour to pass as if I'm not grieving for too long, my grief becomes freezer-burned the longer it hides and stays frozen. When I try to reopen my bag of grief, it will be tougher, harder to handle, and there will certainly be puddles. What if someone else opens my bag of frozen grief? What are the ethics in that?

Logos. You're missing the point.

Miu. But how is any way of grief *wrong*? I thought the motto was [*reciting in unison, with* Lola *from behind the curtain*] '"there is no right way to grieve"' (Klass and Chow, 2011: 344).

Logos. That's correct. But you must have misinterpreted the message. Let me paraphrase: there are only *wrong* ways to grieve. Grief must be *left*, that is, left behind. I think you might be a candidate for our resolve-resistant option. It's only in trial phases, but we're seeing great success. It's pretty much a guaranteed cure for unresolved, complicated, and pathological grief. Resolve to evaporate your grief. [*Quietly, spoken under the breath.*] An operation. [*Enthusiastically*.] Evaporate: reject the states, conditions, and circumstances of that which establishes grief. You will live your life from this point forward griefless. That means no more citations, so that's great news! To evaporate and be without grief's burden you must disallow yourself to continue — or enter — relationships that involve complex expressions and receptions — that is, high-risk emotional investments — of love, care, respect, collaboration, bonded kinship, and mutual aid. You will refuse opportunities to form close bonds, and poof! Grief is gone.

Curtains close.

Act III. Scene 1(b). Chorus. Pathologue

SCENE. *Behind closed curtains, the* CHORUS *chants.*

(*figure*. 15)

Logos. '[T]he possibility of transformation' (Marks, 2000: 6).

Miu. '[A]cted upon by primary processes of displacement and condensation' (Kristeva 1989: 22).

Logos. 'Movements through space and time' (Marks, 2000: 77).

Georges. 'Nothing will easily be tied up together' (Adams, 2019: 241).

Lola. 'Complicated grief' (Klass and Chow, 2011: 344).

Logos. '[A] disturbing light, an eerily beckoning luminosity' (Marks, 2000: 81).

Otsuka. '[A] mechanism for discriminating' (Gruen and Probyn-Rapsey, 2019b: 2).

Lola. '[I]ndividual grief narratives' (Klass and Chow, 2011: 344).

Otsuka. '[B]etween acceptable and unacceptable' (Gruen and Probyn-Rapsey, 2019b: 2).

Lola. '[S]ubjected to a dominant narrative of grief' (Klass and Chow, 2011: 344).

Otsuka. '[B]ehaviors, identities, and beliefs' (Gruen and Probyn-Rapsey, 2019b: 2).

Tomas. '[T]he maintenance of an ongoing attachment with the deceased' (Horn, 2018: 30).

Langbourne. '[W]hat we see and hear' (Stanescu, 2012: 581).

Lola. '"[T]here is no right way to grieve"' (Klass and Chow, 2011: 344).

Langbourne. ‘[S]ocially sanctioned time for grief—has expired’ (Stanescu, 2012: 577).

Lola. ‘[T]hose who are seen as grieving too long’ (Klass and Chow, 2011: 344).

Langbourne. ‘[D]uring our trip to the grocery store’ (Stanescu, 2012: 578).

Lola. ‘[G]rieving at the wrong time’ (Klass and Chow, 2011: 344).

Logos. ‘[I]t hints that the past it represents is not over’ (Marks, 2000: 81).

Lola. ‘[N]ot grieving at all’ (Klass and Chow, 2011: 344).

Tomas. ‘[A]s symptomatic of’ (Horn, 2018: 30).

Tomas. ‘[P]athological grief’ (Horn, 2018: 30).

Lola. ‘Complicated grief’ (Klass and Chow, 2011: 344).

Lola. ‘[T]he former term’ (Klass and Chow, 2011: 344).

Tomas. ‘[P]athological’ (Horn, 2018: 30).

Lola. ‘[M]ade some bereavement counselors uncomfortable’ (Klass and Chow, 2011: 344).

Otsuka. ‘Pathologization’ (Gruen and Probyn-Rapsey, 2019b: 2).

Langbourne. ‘[I]f we start admitting’ (Stanescu, 2012: 581).

Lola. ‘In other times and other cultures’ (Klass and Chow, 2011: 344).

Otsuka. ‘[A]cceptable and unacceptable’ (Gruen and Probyn-Rapsey, 2019b: 2).

Lola. ‘[A]berrant grief’ (Klass and Chow, 2011: 344).

Otsuka. ‘Pathologization’ (Gruen and Probyn-Rapsey, 2019b: 2).

Lola. ‘[T]he labels would be different’ (Klass and Chow, 2011: 344).

[*End* Scene] *Curtains open.*

Act III. Scene 2(a). Pickle Jar Reliquary

SCENE. *It is a quiet evening in March.* Bastet *has risen. The room, same as before, is dressed in candlelight with the return of the subtle and minty aroma of catnip gently wafting through the air. The scent is emanating from the incense burning centre stage.* Bastet *joins* Tomas, Miu, Georges, *and* Otsuka *to converse on the topic of the Pickle Jar Reliquary.*

(*figure* 16)

Tomas. I can't recall if this jar held pickles of the traditional type — that is, the common cucumbers or gherkin — and I have no idea what style, form, or variety the pickled things were, but I'm certain the object that now acts as a reliquary and sits on the nightstand beside the bed once held something pickled and lived in the refrigerator.

Bastet. One night in 2013 or 2014, while I was sleeping, Harold got into my sewing bag, dumped out the contents, and discovered several tiny spools of thread. He must have set to batting the miniature spools of assorted colours over and under furniture legs and arms, throughout the spokes of the bicycle's wheels, under the fridge and back out again. Whether or not he was trying to, he succeeded in building countless intricate webs or perhaps crafty booby traps. When we awoke, we stumbled upon his masterpiece: Harold's avant-garde redecorating techniques. I was proud of his handywork and impressed with his skill. I felt guilty dismantling his work, but I didn't want to trip and fall, and I certainly didn't want him to express an interest in eating rogue thread. I wound up what could be untangled, returned the threads to their respective spools, and placed them back into my bag. Over the years that followed, some of the thread was used here and there, and the memory of that morning always returned. Whenever I had a stitch that needed to be fixed, Harold's threaded webs reappeared in my mind — along with the feelings or pride — and the heartache and heartbreak — all intertwined.

Tomas. These objects were not intended to be toys, nor were they obtained specifically for Harold.

Bastet. They were Harold's readymade sources of endless wonder: a random assortment of commodities that transitioned into toys by virtue of him finding them and toy-ifying them.

Miu. Through reinscribing objects, Harold began the process of our work of transitioning these objects that now fill the Pickle Jar.

Georges. Making systemic changes to the meaning and function of objects may potentiate shifts, both in psychological and object-oriented ontologies. Everyday objects — even those that once

operated as commodities — may make their transformation into the secular-sacred realm, to become relics and reliquaries.

Tomas. From the grocery store shelf to beside the bed, the object became a readymade holding little readymades, a reliquary housing little relics.

Miu. An object filled with objects that have survived despite their destruction.

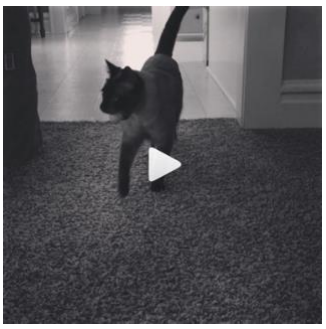
Georges. The "Pickle Jar Reliquary" could be described as a transitional object, a survivor's object, an object *of* or *for* survival.

Miu. The objects placed together, reoriented, and reinscribed.

Bastet. The spools of thread made their return to a space devoted to and for Harold, exemplifying our entangled interdependence. It continues to exist, even if we can no longer be together on this side. He continues, in his afterlife, to collaborate on our family-based arts practice.

Otsuka. It is in the folds of the object's transformation where the sacrifice and the transcendental become entangled.

Tomas. It also might be noted that the jar also contains some of the needleless syringes that he loved to gnaw on and drink water from. Additionally, there are assorted marbles and rubber bouncy balls he played with in the house.



(*figures* 17-18)

Georges. I am classifying this object as a secular-sacred Object of Grief. The subject headings include: first, commodity — sacrificial and transcendental, and second, participation-in-mystery — myth-writing and memory-reinscription.

(*figures* 19-20)

Tomas. The objects of junk drawers or bins of odds-and-ends.

Georges. Given attention and care. A sort of permanence and reverence may develop a secular-sacred status.

Otsuka. Made to have meaning and to matter through their sacrifice and transcendence, objects infused with memories, emotions, and narratives work especially well as Objects as Grief. The sacrificial and the transcendental are central, crucial, and critical components to grief, mourning, and loss. Objects of Grief are transitional and pedagogical, indeed, objects that attain a secular-sacred status, imbued with grief, and transitioned into relics. They assist, no doubt, indeed, to begin a ritual, a participation, in mystery.

Curtains close.

Act III. Scene 2(b). Chorus. Freud's Reliquary

SCENE. *Behind closed curtains, the* CHORUS *chants.*

(*figure* 21)

Miu. '[B]y primary processes of displacement and condensation' (Kristeva 1989: 22).

Logos. '[I]nformation and capital is a relentless tide' (Marks, 2000: 79).

Tomas. 'Freud himself came to realize' (Horn, 2018: 30).

Miu. "[T]he Thing like the self is a downfall' (Kristeva 1989: 15).

Tomas. '[A]fter the death of his daughter Sophie in 1920 and the subsequent death of her four year old son' (Horn, 2018: 30).

Logos. '[M]ost of the movements … are undercurrents' (Marks, 2000: 79).

Miu. '[A] downfall that carries them along' (Kristeva 1989: 15).

Tomas. '[H]e could not let go of these attachments and form new ones' (Horn, 2018: 30).

Logos. '[C]arried with the tide but moving against it' (Marks, 2000: 79).

Lola. '[F]ailing to relinquish the now useless attachment to the deceased' (Klass and Chow, 2011: 347).

Logos. '[E]ddies created around idiosyncratic points in the flow' (Marks, 2000: 79).

Tomas. I failed to mention something, might I interrupt?

Loki. Of course, proceed.

Tomas. There is a citation in the text. It points to the editors Klass, Silverman, and Nickman. A book published in 1996. The evidence should be discoverable upon page number six.

Lola. ‘Pathological grief was conceptualized’ (Klass and Chow, 2011: 347).

Loki. ‘We’re undone by each other. And if we’re not, we’re missing something’ (Butler, 2004: 23).

Tomas. ‘Freud himself … did not commit these personal revelations’ (Horn, 2018: 30).

Miu. ‘[T]he invisible and unnameable’ (Kristeva 1989: 15).

Tomas. ‘[I]n the form of a written hypothesis’ (Horn, 2018: 30).

Miu. ‘*Cadere*. Waste and cadavers all’ (Kristeva 1989: 15).

[*End*] *Curtains open.*

(*figure* 22)

Postscript

Murr. ‘I shot the sharp, supple claws out from my well-furred fore-paws and dug them into the thing which had seized me, and which, as I learned later, could be nothing but a human hand’ (Hoffmann, 1999: 10).

Professor. ‘Cat’s paws are as if they do not exist. Wheresoever they may go, they never make clumsy noises. Cats walk as if on air, as they trod the clouds, as quietly as a stone going light-tapped under water, as an ancient Chinese harp touched in a sunken cave’ (Sōseki, 2002: 104).

Engaging in unrestrained grieving — explicitly, externally, materially, and in public — alongside supposedly non-grieving human individuals, I developed a newfound adherence and commitment to grief. I was hesitant at first — how long might I continue sharing my grief until I make every human in which I interact uncomfortable or upset? Fortunately, I didn’t lose any ties, but interestingly, some loose ties became tighter. A period of over two years marks my longest-form grief. By allowing myself to experience free-roaming, indoor/outdoor, visible, and space-taking grief and mourning, I came to realise that many of the supposedly non-grieving individuals I interact with on a daily basis are also exhausted by ritualistically practicing acts of grief suppression. I was surprised to find that unwieldy grief-exposure is often appreciated and reciprocated when witnessed by, and engaged with, others.

The way of grief and mourning as led by my cats, presented to me ‘the wonderful gift of expressing joy, pain, delight and rapture, terror and despair, in short, all feelings and passion in their every nuance with the single little word, “Miaow”’ (Hoffmann, 1999: 11). Wait, here is another: ‘[T]he ending is not an ending, since it does not conclude … it is contingent’ (Kofman, 1981: 6). Since I remain to feel as if I am engaged in the early stages of this process-in-emergence of practical grief-work and -play, I am confident that it will remain unfinished, always incomplete, and an ongoing act of care.

The document you have thus read is a text lacking evidence of having been *written*. Assembled using the voices of others in a collective asynchronous bricolage of scholars and

archetypes, grief work and play breaks boundaries between curation and composition and perhaps even requires collaborative action. One more: ‘Everything begins, then, with a “citation”’ (Kofman, 1981: 17).

Author(s) biography and contact details

With a background in humanities and library and information science, Scheidl (*homo sapiens*) is an academic, researcher, craftshuman, playwright, and an adolescent-survivor of a pancreatic neuroendocrine tumour and pancreaticoduodenectomy. Scheidl’s technical background was developed in a library, where she produced and maintained collections of archival microphotography (historic newspapers). Her creative practice was forged under the leadership of her familial cats, and includes techniques of relief, transfer, collage, and grafting to produce objects of devotion for her feline companions (or psychopomps).

Acting as an embodied form of self-therapy and a ritualised social practice, Scheidl blends critical theory, animal studies, and mad studies to open conversations regarding morethanhuman grief, mourning, cohabitation, and play. Recent work retrofit anthropic domestic furnishings (including marginal matter, such as print litter) to materialise built environments for interspecies collaborations in life, death, and the space in between. Presently, she occupies herself by hand-polishing and machine-engraving sticks and stones sourced from her backyard. She resides in Portland, Oregon, USA with two saintly cats: Simon and Tomas. **>˘.˘<**

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Arabian feline (*Felis silvestris catus*) lives: Insights into abandonment

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This paper explores feline (*Felis silvestris catus*) - human (*Homo sapiens*) relationships in Saudi Arabia through the lens of cat abandonment. Although sections of Saudi Arabian society care for, love, and accept cats as treasured family members, cats' lives are also commonly viewed as insignificant, freely traded as commodities. When the cat-human bond breaks, cats are often discarded onto the streets without consequences for the abandoner. "Street-living" cats, a ubiquitous presence, are comprised of those street-born, lost, and abandoned. Efforts to reduce the population of street-living cats is gaining traction. However, to improve the lived experiences and care framework of Saudi Arabian felines, the abandonment landscape must be first understood. Coded cat abandonment data collected from social media posts, questionnaires, and interviews show there are a range of reasons given and social factors affecting cat guardian relinquishment decisions and offer a unique insight and understanding into the landscape of cat abandonment in Saudi Arabia.

Keywords: cat (*Felis silvestris catus*); abandonment; otherthanhuman animal - human relationships; relinquishment; Saudi Arabia

Introduction

'There is not an animal on earth, nor a bird that flies on its wings, but they are communities like you…' Qu'ran (6:38).
('Surah Al-An'am [6:38] - Al-Qur'an al-Kareem', n.d.)

Figure 1. Mikey, paraplegic, abandoned 2018. Copyright Oxley Heaney

Figure 2. Phoenix, scalded back, abandoned 2019. Copyright Oxley Heaney

The latest post that broke my heart was a housekeeper begging for someone to take the cat her mistress no longer wanted. She had told the housekeeper to put the cat outside into the street and not to feed him. The posted video of Titus, paraplegic but abandoned despite his disabilities, showed him scared, confused, and alone and reported he hadn't been given food for three days. Another posted photo showed a cat clearly exhibiting severe brachycephalic features sitting atop a mound of soil, too scared to come close to the person trying to offer help. Many other posts showed cats with injuries, and in various states of confusion or fear, with many displaying compromised body conditions due to an inability to adequately care for themselves. Saudi Arabian social media pages and groups are full of people wanting to relinquish their cats and every year prior to the annual holidays, the situation worsens with hundreds of photos of abandoned cats flooding social media rescue sites in the Kingdom of Saudi Arabia (henceforth KSA), asking, begging, for people to take them in. This year it is 50 degrees Celsius outside.[1]

The context

Felis silvestris catus (hitherto referred to as 'cat' or 'cats') are ubiquitous in all urbanisations in the KSA. There is no nationwide, official support for their welfare and at first glance, there appears to be apathy and indifference to their lives on the streets. In contrast to KSA's Middle Eastern neighbour, Turkey, where laws exist requiring the support of street-living animals

[1] Written in 2019. Cities are urban heat islands and Saudi Arabia's temperatures are increasing annually (Almazroui, 2020).

(Anadolu Agency, 2021), Saudi street-living cats simply try to exist, seeking shelter, food, and water from wherever they can find such resources (Heaney, 2019). Such cat care poverty mirrors unsupported street-living cats globally who survive but don't necessarily thrive (Slater, 2002). While their lives and deaths may have gone unnoticed and unseen, with the advent of social media, people are highlighting the suffering of street-living cats, photos of whom may show behavioural and physical signs of them having been abandoned, or in colloquial terms, "dumped".

While there is no official support system for street-living or "community" cats,[2] attempts by people to feed, provide water and shelter are frequently met by authorities removing the resources or, more often, removing the cats through relocation or, controversially, poisoning.[3] Where these cats are then placed is hotly debated, but social media posts report cats being "relocated" to the desert, other parts of town, and rubbish dumps. Considered pests by some and loved by others, these cats are stuck in liminal social spaces of apathetic acceptance, disdain, love, and pity. While many people in Saudi Arabia have joined the fight to request Trap Neuter Vaccinate Return (TNVR) programmes, sanctuaries, and government support, many people still "dump" their animals regardless of the cat's ability to survive in the streets.

As the Kingdom of Saudi Arabia opens its doors to tourism and social media provides a platform to traders, rescuers and relinquishers alike, the domestic cat landscape is receiving increased attention from various stakeholders. Immersed in the KSA rescue world for seventeen years and founding one of the first legal animal welfare charities there, has given the author unique insight into why cats are relinquished or abandoned.

According to Jaroš (2018) otherthanhuman animals (henceforth "animals") and human animals (henceforth "humans") co-shape and co-influence each other and their shared communities. Cats are believed to have begun co-habiting with humans 9,500 years ago (Vigne et al., 2004) with domestic cats descending from individuals in the Near Middle East, including Saudi Arabia (Driscoll et al., 2007). Zooarchaeological records point to a commensal cat-human relationship existing for thousands of years (Ottoni et al., 2017; van Neer et al., 2014; Zeder, 2012). Cat-human relationships have since expanded, with the

[2] There is no support for any otherthanhuman street-living animal.

[3] Poisoning is illegal but is still used as a population control method.

domestic cat now being one of the most popular companion animal species; where an estimated 600 million individuals currently live amongst humans globally (Driscoll et al., 2009). However, these relationships are often fractured leading to both cats voluntarily leaving their human-offered homes and human cat guardians relinquishing their companions. Animal abandonment is a worldwide phenomenon (Coe et al., 2014; Finka et al., 2014; Lambert et al., 2015) but is not internationally defined. US law, for example, specifies abandonment as 'leaving behind an animal alone or permitting the animal to be abandoned in circumstances which might cause harm to the animal' (USLegal. Inc., nd, np). KSA, which has endorsed the Gulf Cooperation Council's (GCC) Animal Welfare Act (Saudi Gazette, 2018), has no specific definition, but the Ministry of Environment, Water and Agriculture's (MEWA) Twitter account declares '[n]egligence of animals is represented by their owners' lack of attention, malnutrition [of the pets] or leaving them without adequate food or food or failing to give them enough rest' (Al Sherbini, 2020: np).

Coe et al.*'s* (2014) Scoping Review of Published Research on the Relinquishment of Companion Animals categorises relinquishment as including abandonment, surrender, and euthanasia. However, the ability to categorise street-living cats as either street-born, lost, or abandoned is not easy without understanding the local cat community. In addition, cats' reactions to humans depend on familiarity and trust rather than a human-constructed category based on birth location. Hence, the author approaches the term for cats found in the streets of Saudi Arabia as "street-living" or "community cats", that may be street-born, lost, or abandoned, but all of whom are considered ethically significant and who have a 'life worth living' (Mellor, 2016: 1).

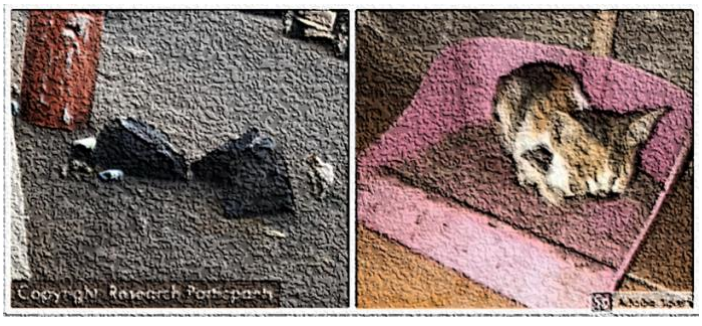

Figure 3. Saudi Arabian 'street-living' cats. Copyright research participants.

The human-cat relationship in the KSA is complex. Cats are omnipresent in all urban environs and while some citizens and residents make great efforts to care for street-living

cats, cats are routinely found and reported as intentionally abandoned. KSA street-living cats are often regarded with ambivalence or disdain, even when obviously in a distressed state (Heaney, 2019). Some consider cats as nuisances, others as "wild" creatures whose natural habitat is the street where some believe cats possess an innate ability to survive. Yet the nascent emergence of KSA citizen and resident animal rescue groups and individuals reflects a sea change in the Saudi Arabian worldview of social responsibility towards domestic cats. This change has been catapulted by social media, in a shifting, once closed, now opening, society.[4] Rescuers, consisting of visitor and tourist expatriates and Saudi citizens, represent the changing landscape and emerging perception that the street is an unsuitable environment for cats, especially if unsupported. Social media provides a platform for witnessing cat suffering and street deaths which are considered not 'good deaths' (Cottrell and Duggleby, 2016; Meier et al., 2016), catalysing a desire for a paradigm shift in the treatment of cats.

A World Society for the Protection of Animals (Batson, 2008) report estimated that 58% of the global cat population, or 19.2 million, are "feral"[5] or "stray cats". However, these contested terms of "feral" (Hill et al., 2022) and "stray", which imply cats are "pests", unwanted or a nuisance, are all tainted with beliefs that these animals are 'out of control' (Wilson et al., 2018: 97), unsocialised, and fearful. Not only does this again pigeonhole cats into homogeneous categories upon which anthropocentric "solutions" can be applied, without consideration of the individual cat biographies and experiences, but it also delineates cats and humans into "problems" and "problem-solvers". However, Lestel et al. (2006: 157) suggest that "humano-cat" society should be studied with reference to the idea that humans and cats both constitute parts of a multispecies city with communal spaces. Indeed, the author and many rescue groups in KSA feel strongly that cats are part of Saudi communities, having shared spaces for millennia, and are deserving of treatment as ethically significant beings. This worldview upholds Islamic teachings, anthrozoological multispecies and transspecies worldviews (Haraway, 2008; Hurn, 2015; Kirksey et al., 2014; Kohn, 2007; Kopnina, 2017; Nordstrom et al., 2020; Wolch et al., 1995), and contemporary companion animal welfare guidelines (Furber, 2015; Haque et al., 2011; Masri, 1987; Masri, 2007; Min et al., 2016).

[4] Vision 2030 (https://vision2030.gov.sa/en).

[5] See Hill et al. (2022) for how humans wield the term 'feral'.

This current article asks what reasons are given for, and what factors affect, cat abandonment in KSA. The paper attempts to spotlight the multiple issues surrounding cat abandonment in KSA, which constitutes a substantial, grave, and nationally unaddressed issue that would benefit from further research. Furthermore, understanding cat abandonment is one of the first, vital steps in planning cat management programs (Finkler and Terkel, 2012). Therefore, this research attempts to offer a foundation for improving cat welfare in KSA and to become a catalyst for the development of a cat care framework to improve the lives of cats and their human counterparts in KSA communities.

A review of literature

In their Scoping Review of Published Research on the Relinquishment of Companion Animals, Coe et al. (2014: 260) examined 192 articles on the topic of companion animal relinquishment. Of these, 68.2% originated from the United States, 18.2% from Europe, 7.3% from Australia, 3.6% from Canada, and 9.4% from Taiwan, Brazil, New Zealand, South Korea, the Bahamas, and Israel combined. Since 2014 a further seven articles concerning cat relinquishment have been published (Fatjó et al., 2015; Fukimoto et al., 2019; Kogan et al., 2019; Mohan-Gibbons and Weiss, 2015; Phillips et al., 2018; Wassink-van der Schot et al., 2016; Weiss et al., 2015). While these studies extend research to the Republic of Serbia (Stojanović, 2011), Spain (Fatjó et al., 2015), and the USA (Clancy et al., 2003:), none have focused on the Middle East. The only one to refer to the Middle East (Seimenis and Tabbaa, 2014) researched "stray" populations, not relinquishment or abandonment.

The scoping review combined articles on dogs (*Canis familiaris*) (89.1%), cats (63.5%) (122 primary research articles and commentaries), and small mammals (9.4%). 87.8% of the primary research data concerned dogs and only 52.2% researched cats (60 primary research articles). The percentages of reasons for cat relinquishment are as follows: aggression (51%) followed by disobedience and other behavioural issues (46%); destruction and being over-active and noisy (39.9%); soiling in the house (44%); fearfulness and escape (33%); unfriendliness (33%); the individual animal's characteristics (28.8%); health and illness (28.8%); and separation anxiety (2%).

Further studies concluded the following as the most significant reasons for relinquishment: animal behaviour issues (Arkow and Dow, 1984; Spencer, 1993); lifestyle changes such as moving (Arkow and Dow, 1984); animal behaviour, allergies, moving house and landlord issues (Patronek et al., 1996); animal behaviour (soiling, disharmony with other companion species) and 'human lifestyle' (including moving house) (Salman et al., 1998:); allergies, a new baby (Scarlett et al., 2005); and failed human-cat relationships (Luke, 1996). These studies demonstrated multi-dimensional reasons for relinquishment.

Figure 4. Multidimensional reasons for relinquishment - Previous studies

These studies were conducted in countries with established animal welfare infrastructures. However, even in countries with developed animal welfare systems, relinquishment and abandonment still occur. Millions of relinquished cats are euthanised each year, for example, in Sweden (Eriksson et al., 2009:), the USA (Salman et al., 1998; Zawistowski et al., 1998), and Australia (Chua et al., 2017), despite peoples' attempts to address relinquishment factors (Salman et al., 1998). Relinquishment terms such as

'disobedience' offered by Coe et al. (2014: 12) are problematic, as the term veils the expectations and the personalities of both actors. One study showed over 58% of cat guardians thought cats 'misbehave out of spite' (Salman et al., 1998: 215). This problematically applies anthropomorphic or egomorphic (Milton, 2005) misinterpretations of cats' attempts to express their personality and agency (Maran, 2016), thereby risking expulsion. Furthermore, while humans often embrace multispecies homes (Hurn, 2012; Irvine, 2004; Ritvo, 1987), Irvine explains 'living an animal-inclusive life requires compromising the hegemonic view of the home as a showplace' (2008: 126), while Tuan further points out that a pet must become 'as unobtrusive as a piece of furniture' (1984a: 107).

Methodology

Qualitative data collection was used in this research.[6] Semi–structured face-to-face interviews were conducted with two veterinarians who are involved in cat rescue within KSA. A qualitatively coded thematic analysis was conducted of rescue groups' social media posts on Instagram and Facebook, and online questionnaires were distributed to familiar English-speaking rescue groups and individuals. All participants were involved with cat rescue in KSA, and all data concerned cat rescue only within KSA. The author's own autoethnographic and researcher voice as a long-time cat rescuer is interjected throughout this research, to add reflexivity and embodied knowledge of the situation. The interviews and questionnaires included a series of questions regarding experiences of cat relinquishment and abandonment in KSA, including reasons given for relinquishment and rescuers' perceptions on issues surrounding relinquishment and abandonment. To preserve participant anonymity this report reveals no identifying features.

The results from an unpublished report created by a rescue group in 2019 were additionally included to both add to data and to triangulate reasons. This unpublished report assembles data from 639 adoption applications. Each adoption application asks questions concerning why an adopter may relinquish a cat post-adoption. The report highlights numerous factors resulting in post-adoption relinquishment, despite the analysed applications being filtered to only include applicants who declare they agree to a commitment

[6] Ethics approval was granted by the University of Exeter's College of Social Science and International Studies (SSIS) Ethics Committee 1st April 2019. Reference number 21819-125.

to keep an adopted cat for an expected 15-year timespan. This juxtaposition demonstrated how intended commitments can easily be fractured or demonstrates no actual long-term commitment to keeping a cat, despite claiming this was so. This latter finding was also reflected in the research participants' perspectives. Hence, these report findings were included as they offered prelude-to-abandonment factors.

Permission was obtained from the administrators of 25 social media Instagram or Facebook accounts. However, because many of the accounts did not contain the type and style of data useful to the aims of this research, only three accounts, open Facebook groups or unrestricted Instagram accounts, which provided the greatest volume of published content, were analysed. Two accounts included direct and shared posts from both individual and rescue group origins. The three social media accounts advertised a wide range of cats that were posted as either vulnerable to relinquishment; injured, diseased, or street-living cats unable to care for themselves; or sought help with lost or injured cats that had been rescued but needed rehoming. The data analysed from these social media accounts covered the period from March 2018 - March 2019.

Techniques from Glaser and Strauss' (1967) grounded theory were chosen in an attempt to mitigate researcher bias, as grounded theory techniques identify factors contributing to abandonment that are grounded in data. Grounded theory uses coding as its central process, wherein data is analysed, sections are attributed a code, then, through an iterative and comparative process, codes both merge and fracture to eventually create 'conceptual abstraction of data' (Holton, 2010: np). 'Coding is a way of indexing or categorising the text in order to establish a framework of thematic ideas about it' (Gibbs, 2012: 2) whereby concepts are identified and relationships established. The emergent theme findings from the grounded theory process are presented below.

Pathways to abandonment results

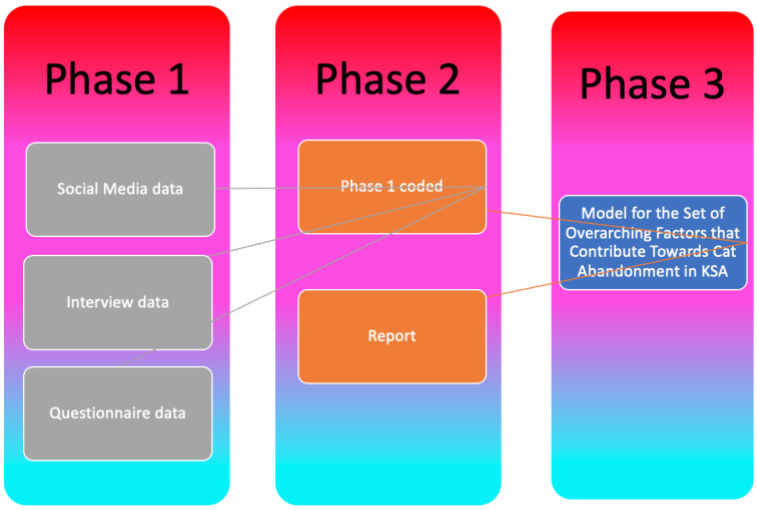

Figure 5. Coding and distillation methodological process

Figure 5 shows the methodological process. Phase 1 employed grounded theory distillation for both given and perceived reasons for abandonment (Figure 6). These results were then aggregated with the reasons for relinquishment from the unpublished report created by a rescue group in 2019 (Figure 7) to give results in Figure 8. These phase 2 findings were then further consolidated in phase 3, with the participants' perceived factors contributing to relinquishment and abandonment to form a Model for the Set of Overarching Factors that Contribute Towards Cat Abandonment in KSA, presented in Figure 9.

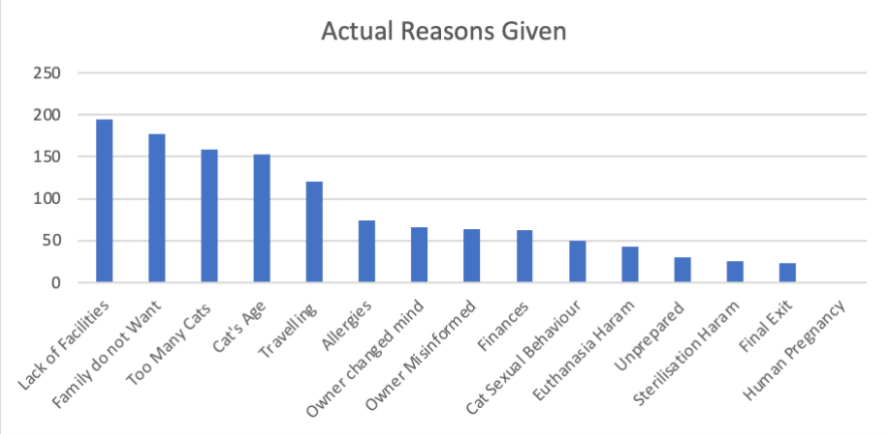

Figure 6. Research coding results from social media, interviews, questionnaires

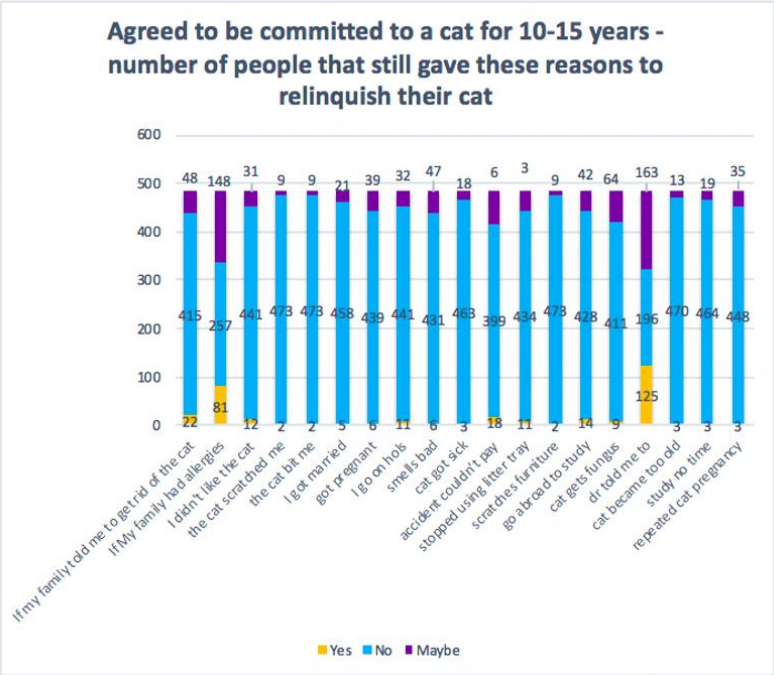

Figure 7. 2019 Unpublished report research results

Figure 8. Combined research findings - Overarching AGRs for relinquishment

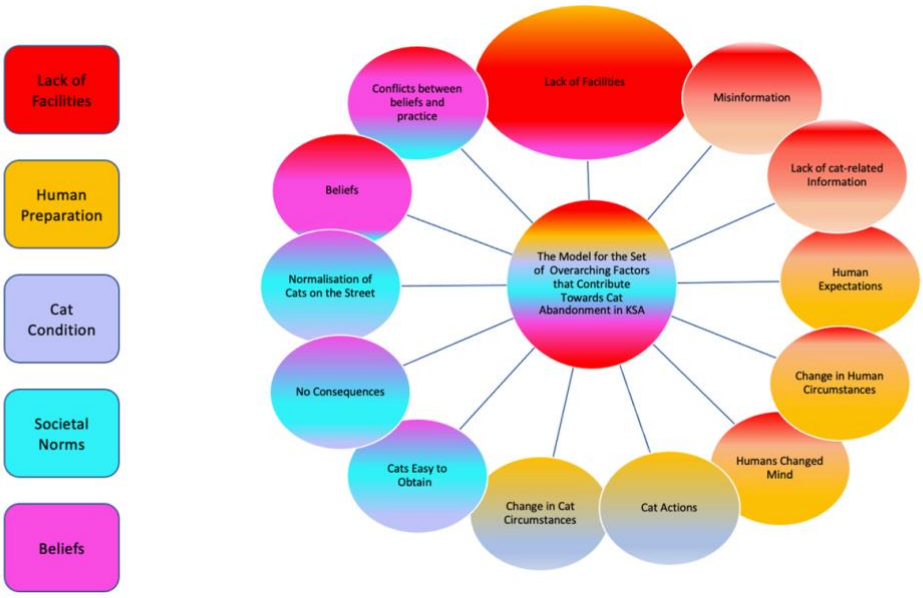

Figure 9. Model for the Set of Overarching Factors that Contribute Towards Cat Abandonment in KSA

The Model for the Set of Overarching Factors that Contribute Towards Cat Abandonment in KSA shows 13 distinguishable, but intersecting determinants reported as overlapping, contributants that impact and influence cat relinquishment and abandonment in KSA. The predominant categories for abandonment are:

- a dearth of affordable, accessible, modern animal-supporting **facilities** across KSA
- being unprepared for cat guardianship due, in part, to the lack of nationwide contemporary feline-related education/information and a plethora of circulating misinformation
- **societal norms** resulting in the ability to easily acquire cats (often at a very young age, for example two months) which leads to:
    - changes in **cat actions** precipitated by, for example, changes in health (e.g. sexual maturity, pregnancy, injury or illness) often causing the cat guardian to change their mind about retaining cats
- **changes in cat guardian circumstances** often cause a cat guardian to change their mind or find themselves under pressure to relinquish a cat

- a prevailing **normalised belief** that cats can survive on the street, which, combined with the lack of facilities and information to help cat retention and the absence of consequences for abandonment further lead to cats being abandoned in the streets
- penultimately, a prevailing set of **beliefs** concerning what is *haram*[7] or natural and actions that invite divine condemnation, further attract a pathway to abandonment
- although KSA laws warn of fines for abandonment, in reality there **are no consequences or mechanisms** in place to discourage abandonment.

The 13 emergent themes are filled with nuanced reasons for relinquishment and abandonment, and some of these nuances are unpacked below.

The lack of national facilities

Multiple emergent consequences from a lack of national facilities stands out as the primary component affecting the faceted reasons for relinquishment and abandonment. Nationwide facility affordability, accessibility, credibility, and an omission of cat care education stifles genuine attempts for cat guardians to reach and maintain high cat care standards. Only the cities of Riyadh, Jeddah, Tabuk, and Dammam/Khobar house a handful of suitably equipped and trusted vet clinics.

Consequently, many cat guardians reported not having access to veterinary care. Where private veterinary care is available, costs are high and vary in contemporary care facilities and knowledge levels. Rescue-focused facilities[8] are overwhelmed leaving vast gaps in cat care availability across KSA. Where cat sterilisation is sought in attempts to reduce the population of "unwanted" cats, in either homes or communities, it is often either not available, or out of financial reach. This situation often overwhelms cat guardians, who then feel they have no choice but to either "gift"[9] cats, try to find adopters, or to abandon cats. Furthermore, a lack of proficient, affordable sterilisation facilities prevents rescue groups carrying out Trap Neuter Vaccinate Return (TNVR) in large numbers, thereby only being able

[7] Forbidden ('Haram - Oxford Islamic Studies Online', n.d.)
[8] All unofficial, bar two facilities in 2019 and five facilities in 2022, however, the situation remains insufficient.
[9] The practice of giving cats to friends and family, who often do not want them. This further results in cat abandonment.

to reduce populations in closed spaces, such as compounds, and even then, only if compound managers allow.[10]

All cities covered in this research were reported as having only a handful of veterinary clinics that house both up-to-date equipment and staff trained to practise veterinary medical care that meet recognised international standards**.** In fact, inadequately qualified staff were considered a major problem. Animals were reported being routinely killed or maimed by unqualified or unsuitably trained staff, who are not brought to account.[11] Vets who see such practices are unwilling to report other vets due to the fear of their own position being threatened by people in authority or those with *wasta*,[12] or being disparaged in revenge. Furthermore, the current complaints system requires that clinics be immediately closed pending investigation, which vets wish to avoid.

Participants reported cat guardians being exposed to vet impersonators and therefore receiving inappropriate, questionable treatment. Unsuspecting cat guardians found their cats received inappropriate treatment, ineffective at best, deadly at worst. This poor practice, and violent veterinary care, when identified, is encouraged to be reported. However, although there is a Ministerial system[13] for the public to report concerns of cruelty and malpractice to officials, the procedure is difficult for non-Arabic speakers[14] to use; findings are not available to the general public and action is rarely visibly taken which results in no apparent improvement in the general care for companion animals, therefore breeding a lack of trust in the obfuscated reporting system.

Similar to many other countries, there are no government facilities for street-born, lost, or abandoned animals. Only two official, private companion animal shelters (who intake relinquished and rescued animals) exist across KSA. However, it is not illegal for private individuals to help cats, nor is it illegal to shelter them, as some people do in large numbers. Yet, to legally raise funds in order to provide basic, necessary cat care (food, shelter, and medical care) one must be a legal charity (Arab News, 2016b; Habib, 2018; Samir, 2020; تأسيس جمعية أهلية | Ministry of Human Resource and Social Development, n.d.). The steps to become a legal charity are burdensome and only open to Saudi citizens. This prevents a large potential

[10] Even when TNVR is agreed, new compound managers may decide to expel a sterilised, managed colony.
[11] As they remain in practice.
[12] *Wasta* means the use of social connections to obtain special privileges.
[13] A telephone number and an email address.
[14] 30% of the population are expatriates.

reservoir of voluntary rescue labour, being unable to successfully cross the bureaucratic challenges of charity creation. Therefore, many rescuers are limited in their ability to raise funds and thereby implement cat population reduction strategies, intake cats threatened with relinquishment, or provide assistance to street-living cats. Furthermore, setting up large-scale sanctuaries or shelters is beyond the reach of many people without funds or *wasta*. A recently constructed legal animal shelter was filled with hundreds of cats within a few weeks of opening and experiences cats being abandoned daily outside the facility.

Boarding facilities are provided by some veterinary practices, which offered caged boarding. Smaller, home-environment "shelters" and boarding facilities are provided by an increasing number of private individuals and groups but are insufficient in number to meet either cat relinquishment requests or boarding demand and are beyond the financial reach of those with multiple cats and/or low incomes. Participants report cats abandoned in alarming numbers every holiday season. Abandonment locations include veterinary clinics, pet shops, boarding facilities, parks, corniches, and "simply" being put into the street outside the home. This list is not exhaustive. Furthermore, coercive techniques are often applied by abandoners, for example a cat may be deposited for boarding with no intention of future collection.

Intentional cat breeding is unregulated, and participants describe dirty, unregulated facilities which produce cats sold as commodities, unvaccinated against disease and then sold to an uninformed public. In contrast, many rescue volunteers attempt to rehome cats that are pre-sterilised and pre-vaccinated in efforts to reduce abandonment related factors. In addition to breeding spaces, pet shops and grooming parlours are described as loci for disease, particularly ringworm.[15] Often, uninformed cat purchasers are then overwhelmed, cannot find appropriate medical help, and cannot return the cat to the breeder or shop. Breeders are generally considered to conduct unethical behaviour regarding breeding environments, cat welfare standards, and a unidirectional cat selling process. Breeders were reported as having been seen openly abandoning unwanted cats. Pet shops, which also breed and provide breeding services,[16] abandon cats with undesirable characteristics, such as behaviour (not friendly enough), age (too old at six months), or physical characteristics (injury-related or considered not cute enough), behind their shops.

[15] Colloquially called 'fungus'.
[16] Where female cats can be taken and locked in cages with male cats kept by pet shops as breeding studs (until too 'old').

The chasm of companion animal support facilities creates cat care poverty and hinders attempts for cat guardians to act responsibly. While some may recognise their cat as a loved and loving sentient being, it is not always possible to maintain the relationship or to relinquish them responsibly. Additionally, these issues egregiously allow poor companion animal health standards to perpetuate nationally, exacerbating cat guardians to be inclined or forced to intentionally (and illegally) abandon their cats. Furthermore, such barriers hinder Saudi Arabia's efforts to promote the One Health framework (G20, 2020).

Inadequate preparedness for cat guardianship

There is a paucity of national cat welfare campaigns. This gap is filled by dedicated rescuers who have created social media cyberspaces to try to assist potential cat guardians with preparatory and relationship supportive information. However, well-intentioned but out-of-date misinformation harmfully floats in cyber social spaces. Inadequate and often conflicting veterinary advice, plus reliance upon outdated medical websites, social media, and persistent myths regarding cat care and welfare has also led to the spread of misinformation. This, in turn, was reported as a major factor in peoples' unpreparedness for cat guardianship prior to acquisition and prevented the expectations of cat guardianship meeting reality. Such unpreparedness prompts cat guardians to change their minds.

Change in cat guardianship circumstances

Cat guardians relinquish cats due to reported changes in their own circumstances. Family pressure carries great weight in KSA. Cat guardianship appears to be confined to one or two family members. Patriarchal power[17] encompasses family members who live outside the immediate household, and the deep-rooted, hospitality traditions demand that any family member not wanting a cat in a household, whether a temporary visitor, or someone with a controlling influence, may request or demand a cat to be expelled. Ordinarily, if such a demand is made, the fate of the cat and the feelings of the cat guardian are reported to be of little concern. Following any failed negotiations, the cat guardian then may try to hide the cat, to seek an alternative home for the cat, or to submit to the decree and expel the cat into the

[17] Patriarchal power changed as this research was conducted (see Al Arabiya, 2019 for more information).

street. Many cat guardians become distraught, often begging and pleading for help online. Often concerned with the fate of the cat rather than their own loss, but with no official shelters and suffering family pressure, they are often forced to abandon the cat in the street.

When family members develop any allergy, cats may be immediately incriminated without any allergy testing being performed. However, manipulative strategies engaged to justify irresponsibility were perceived by participants. When solutions to seemingly solvable issues in cat-keeping decision-making were presented, relinquishers reportedly offered disingenuous but incontestable excuses. Examples given included allergies said to suddenly occur after years of cat guardianship. Furthermore, although allergies can be mitigated, giving this as a relinquishment reason is often considered immutable by relinquishers due to the authority of a medical doctor's voice. Participants recounted relinquishers' use of such reasons as they will be unlikely to be challenged. In addition, medical fear also provokes relinquishment. Participants revealed many cat guardians whose doctors had recommended cats be put on the street in cases of human pregnancy. Participants reported patients were regularly told that cats *will* cause miscarriages or foetal deformities. Again, although the cat guardian may wish to arrange safeguards rather than choose cat relinquishment, they may be forced into precautionary relinquishment by family members.

Cat actions

Unwanted physical or emotional changes in cats may rupture the cat-human bond. Cat characteristics are reportedly compared on social media, family social gatherings, and even at weddings. Characteristics such as looks, age, and behaviour can soon become unfashionable. It is the social norm to buy kittens as entertainment for children. In such cases, when cats express any agency of self-defence, they are deemed aggressive and ejected from the family. Furthermore, aging beyond the perceived age of usefulness for entertainment, usually kittenhood, invokes cat rejection.

Encouraging or compelling cats to have sex and to produce kittens is noted as a societal norm with a belief that the actions are the cats' right to perform and enjoy. Also, a desire to luxuriate with cats in motherhood and to produce cute kittens is considered an entitlement. However, these practices result in being overwhelmed with cats, often with

more than are willingly accommodated. As mentioned previously, the relocation of "unwanted" cats becomes problematic. If gifting or adoption is not possible, the "superfluous" cats are simply abandoned. However, not only does the household overproduction cycle continue, but both the mother cat and the kittens may be at risk of expulsion. Accordingly, further unsterilised cats are not only exposed to a multiplicity of street dangers, but the latent ability to produce more "unwanted" street-living cats prevails. When cats become 'parents-in-the-making' (Haraway, 2008: 66) through human controlled reproduction, their status as 'nonkin' (Haraway, 2008: 66) is solidified when they are discarded but the babies kept. Furthermore, cats and kittens are also treated as 'lively capital' (Haraway, 2008: 52) or 'emotional commodities' (Shir-Vertesh, 2012: 420).

Kittens born with deformities, cats who become injured, or cats whose health is compromised, especially older cats, are at higher risk of eviction. Reasons can be a mix of unsightliness, an inability to care for the cats due to a lack of facilities or inexperience, and inconvenience. However, participants reported many abandoners believe that if a cat dies in their care, they are spiritually accountable. Moreover, if the cat were put on the street, the accountability dissolves and the cat's fate is declared by divine authority. Participants question whether this reason also camouflages strategies to avoid inconvenient cat guardianship.

The sexual behaviour of cats may become highly problematic. As mentioned, most cats are traded without being sterilised. Both sexes may emit loud sexual vocalisations and become territorial which can involve fighting and hormonal marking. These behaviours can be simultaneously irritating and interpreted as their right to mate, or to "marry".[18] If cats are not evicted due to this behaviour, they may be encouraged to wander outside the home to find a mate. Cats become lost, or return pregnant or injured placing their altered, transgressing condition at risk of destabilising the human-cat bond. Many participants felt cats were not seen as lifelong companions but rather having 'flexible personhood' (Shir-Vertesh, 2012: 421).

[18] A euphemism in cat breeding parlance meaning 'sex'.

Easy to acquire, easy to abandon

Ease of cat acquisition coupled with no regulatory framework concerning the sale of cats results in their being bred and traded in places where disease prevention is uncontrolled. Not only does this result in poor cat health, but also creates friction and tension when cat guardians are unprepared.

A pervasive belief exists within KSA that cats belong "naturally" in the street, where they can and do live healthy, free lives without care or worry. Participants report a belief that air inside the home is "dirty" and cats (even if sick) benefit greatly from being put outside to "get fresh air".[19] This institutionalised belief is deeply embedded and was illustrated in 2018 when Saudi Telecom (STC) launched an advert (Figure 10) with an animated video of cats underneath tables in an outdoor café. These cats spoke to each other about how the streets were "theirs". Such normalisation both blinds people to cat suffering and allows abandonment to be considered as not only acceptable but without consequence to society, cat guardian, or cat.

Figure 10. Saudi TeleCom advert

Such perceptions contribute towards behaviours prevailing in KSA. Indeed, the reason of "travelling" is often given for relinquishment, especially before annual holidays. Although social media shows responsible cat guardians searching for and often struggling to find

[19] Similar to the UK notion of 'going out to get fresh air'.

suitable boarding facilities, participants report annual mass abandonment before annual, extended, and pre-planned holiday periods. Although a lack of appropriate facilities exacerbates this abandonment, participants recounted that there is little or no preparation for a multitude of "owned" cats, who are purposely abandoned in various locations: the street, at veterinary clinics outside opening hours, at grooming salons where they remain unclaimed, or outside restaurants, or in parks. These cats are left to fend for themselves for weeks (the holidays can last up to three months [Arab News, 2016a]). There appears to be some awareness of the likelihood that abandoned cats will suffer, but there exists a portion of the cat owner society that remains undeterred. If the cat manages to survive, upon the cat abandoners' return it *might* be reinstalled as a family member. However, as the cat has lived on the street it may now be considered "dirty" and have transgressed to an unrestorable, household acceptable, pureness.

Final exit

"Travelling" also affects non-Saudi Arabian residents. Upon completion of their contract, non-Saudi residents and their dependents must leave KSA; this is known as "final exit". Once a final exit visa is issued, the resident has a limited time to leave KSA and their re-entry is forbidden unless a new visa is issued. Many non-Saudi residents of various nationalities acquire cats while in KSA. However, the pay scale of some nationalities,[20] the confusion in the companion animal repatriation process, and lax attitudes towards companion animal responsibility leads to easy cat abandonment without consequence for the abandoner. Recent grassroots attempts to use social media to help people understand the complex repatriation process and find affordable repatriation solutions[21] have reduced this form of cat abandonment. However, these groups are not universally known.

Beliefs and conflicts

There are likely thousands of rescue cat guardians and for-pleasure cat guardians, and research participants revealed that there are a good proportion of these who disagree with

[20] Pay scales are normally based upon national origins.
[21] Cat excess baggage and cabin tickets are cheaper than cargo.

either sterilisation or vaccination. Some individuals believe vaccinations bring disease, and a great many consider sterilisation *haram*, although Saudi Islamic scholars have ruled the procedure is not (Abdul-Rahman, 2007). Multi-cat families often become unwanted and unmanageable, and cats are often gifted or sold, unsterilised and the cycle continues.

Cats' welfare is entangled in the country's position regarding both euthanasia and "pest control." The conflict exists between an immutable belief regarding the sanctity of life over the suffering of animals even when abandoned. Although there is no definitive definition, the term sanctity of life 'embodies that the idea of life is sacrosanct' (Muhammad et al., 2016: 24), but there is no prevailing view that there is responsibility towards the quality of the life (of cats in this instance) or death, once life (including unborn kittens) has begun. Care is then relegated to "nature" and God. Taking a life is deemed incontrovertibly *haram*, meaning euthanasia is rarely considered even when cats suffer at end-of-life. Spiritual accountability dictates if a cat becomes ill during cat guardianship, the sick or dying cat may be preventatively expelled from the household. However, deliberate acts of killing, whether intermittent and spurious (Abudawood, 2018) or a form of population control employed by Baladia authorities, are reportedly frequent. This contradictory approach towards the Islamic view of the taking of a life is difficult to reconcile, however, it is reportedly generally ignored by those who may be frustrated by, or apathetic, towards cats. Furthermore, moral outrage may occur when euthanasia or abortion is considered for any cat in any circumstance, even if euthanasia or pregnancy leads to abandonment and suffering. However, a death caused by abandonment passes without similar fury. It is challenging to navigate these discordant views.

Discussion

Previous studies on relinquishment reveal multidimensional reasons for these practices, reflected in this study's findings. Graduated factors across a variety of relinquishment reasons can contribute towards the collapse of the cat-human bond. The reasons identified in this research for relinquishment (which can be considered a prelude to abandonment) both converged and diverged with previous cat relinquishment studies.

Figure 11. Comparative studies vs the Model for the Set of Overarching Factors that Contribute Towards Cat Abandonment in KSA

Convergence is shown with the righthand side of the Model for the Set of Overarching Factors that Contribute Towards Cat Abandonment in KSA and divergence shown on the lefthand side of the model (Figure 11). However, although factors on the lefthand side of the model, such as cats being easy to obtain and cultural belief systems, are not mentioned, this does not imply such factors are absent from previous studies. The primary diverging reason given for KSA relinquishment and abandonment was lack of affordable, accessible, and credible nationwide facilities. However, this lack of facilities, along with the socially accepted no-consequence ease of breeding, trading, and disposal of cats presents a backdrop of apathy concerning the in-plain-sight treatment of cats as ethically insignificant beings.

Cats fall in a space of being 'animate possessions and unique commodities' (Amato, 2015: 9), resources and property (Russell, 2002), and occupy the liminal space between domesticated and "wild" (Crowley et al., 2020). However, cats shaped as possessions and commodities require upkeep which demands cat guardians accept a level of responsibility. The question of where society and cat guardians should stand on the spectrum of accepting a level of responsibility of care depends upon the individual and ultimately upon the powers

that guide society. If responsibility is surrendered, once on the street, abandoned cats traverse categories: from a visible status as a family member and household companion animal, transgressing to a societal pest or nuisance whose individuality becomes invisibilised in disenfranchised street-living cat communities. The abandoned cat becomes part of the street-living cat community, thereby forced to become a semi-independent cat, which Jarõs (2021) suggests will be looked upon negatively where they are neither a possession to be responsible for, nor a commodity to be maintained for trade. Now tainted with street matter regarded as "dirt" or "pollution", street-living cats become 'matter out of place' (Douglas, 1966: 35), out of place for care and considered out of place by an influential part of Saudi society.

Although societies tend to categorise companion animals as possessions and commodities, cats and humans can develop mutually strong bonds (Hill, 2020; Urquiza-Haas and Kotrschal, 2015; Vitale, 2018) to the extent where cats are considered family (Johnson, 2009; Veldkamp, 2009). However, the choice to retain the relationship bond is invariably beyond the cat's agency. Shir-Virtesh (2012: 425) describes these loving relationships as being 'redefined' when companion animals are 'demoted' (2012: 420) and physically and emotionally removed from consideration. This flexible personhood is either broken by forces beyond a cat guardian's control or when a cat's existence no longer serves human use (Malamud, 2013). Furthermore, this may be considered a form of breaking the domestic animal contract (Palmer, 1997). Domestication creates human dependency (Swart and Keulartz, 2011). A conundrum emerges within the idea of cats who are considered as property, where humans have the freedom to acquire cats without experience or knowledge, and then are offered the freedom to cast off encumbrances and responsibilities without consequence by later abandoning them. Leaving cats to their divine fate appears to abrogate any responsibility humans may feel to a domesticated community member whose self-dependence has been removed through the domestication process.

Reframing cats as ethically significant beings

Thinking of cats as kin appears fraught; they can be loved and integrated into a family unit, but such interspecies relationships often do not endure, and bonds are broken when impediments and changing circumstances come into play and cats then become 'emotional

commodities' (Shir-Vertesh, 2012: 420). Power shapes interspecies relationships that alternate between care, indifference, and harm (Lorimer, 2010). When structure influences perception and restricts agency, and human discourse outweighs animal agency and subjectivity (Srinivasan, 2013), the animal may not be seen as free on the street as an abandoned animal, but rather as forsaken (Srinivasan, 2013). Furthermore, although pet-keeping is a process of domination over nature (Tuan, 1984b), abandonment continues to be a form of domination through deliberate and conscious neglect.

By framing relinquishment with the human needs as priority, the effect on the relinquished animals becomes invisible and their interests are often forfeited. DiGiacomo et al. when studying relinquishment to shelters, demonstrate this by declaring '[t]he staff offer the public shelter for unwanted pets and yet disparage those citizens who seek that service' (1998: 42). Beneath this statement lurks a fundamental anthropocentric assuredness that shelters are there for human convenience, not for the benefit and welfare of animals. In this context there is an anthropocentric certitude that exists with those who see cats as commodities, or 'lively capital' (Haraway, 2008: 45), where humans have an anthropocentric prerogative to treat cats as property, objects, income, and disposable in perfunctory relinquishment actions. It could be argued that this worldview treats animal rescuers globally as existing primarily to serve and submit to cat guardian interests, where they are expected to capitulate to demands from relinquishers to accept unwanted animals regardless of the consequences for the animal. This anthropocentric attitude is also seen across much of the KSA relinquisher or potential adopter landscape.

However, reframing cats from commodities that serve our needs to community animals, part of our neighbourhoods with whom our lives are co-created, results in a reconnection with Islamic principles regarding otherthanhuman animals. Such principles, which express concern for all living species and reach out through a variety of *hadiths*[22] to guide communities, are in line with contemporary anthrozoological thought which seeks to reframe otherthanhuman lives within a posthuman framework. Scholars (Haraway, 2015; Kirksey, and Helmreich, 2010; Tsing, 2012) explain that '[a]ll living beings emerge from and make their lives within multispecies communities' (van Dooren et al., 2016: 2), however, we do so with different levels of interaction and attention (van Dooren et al., 2016). Moreover,

[22] *Hadiths* are the words and actions of the Prophet Mohammed and are considered a major source for Islamic law after the Qu'ran.

unequal power relations (Tuan, 1984b) lead such scholars to recommend we rethink our consequential relationships and reframe our views towards multispecies communities (van Dooren et al., 2016). Lestel et al. remind us that cities are hybrids of humans and animals and suggest that 'humano-cat' (2006: 157) society should be studied with reference to the idea that humans and cats both constitute parts of a multispecies city. Having shared spaces for millennia, cats are part of our communities, and being treated as ethically significant beings would uphold both Islamic teachings and multispecies philosophies which would substantially enhance companion animal care frameworks in Saudi Arabia.

Conclusion

Many of the reasons given for and the factors affecting abandonment are inextricably enmeshed and are exacerbated by an underdeveloped cat care landscape. A lack of competent, contemporary, and accessible animal welfare facilities are factors which aggravate abandonment. For example, a family choosing not to retain a cat may feel there are already too many cats in a household, which in turn can be related to a number of factors, such as the lack of sterilisation facilities or the belief that sterilisation is *haram*; cats being considered to be too old once they are over 18 months to two years of age (again, related to unsterilised cats and their subsequent sexual behaviour); people travelling, which is significantly related to the long Ramadan and Haj holidays; or due to allergies. This in turn is reportedly exacerbated by a lack of information, misinformation, and doctors' lack of thorough diagnoses. Humans changing their mind can also be related to misinformation, which is intensified nationally by poor and out-of-date information, or by reliance on social media for cat-related information. Vets who are out-of-date, duplicitous, or poorly trained reportedly create a plethora of problems. Circumstances of vets causing harm to cats through professional misconduct were shared. Stories are told of vets advising that sick cats be abandoned on the streets and replaced with another. Finances seem to play less of a role,[23] but abandonment can be associated with high vet costs and multi-cat households where care costs become disproportionate to household income. The lack of sterilisation facilities and the belief that sterilisation is *haram* often results in an overburdened multi-cat household

[23] Although finances have seemingly become more of an issue since this research was conducted (pers. obs.).

and to cats being unwanted due to their sexual behaviour. Euthanasia is also considered *haram* and there is a lack of hospice care for terminally ill cats. The belief that an "owner" will be accountable for the death of a cat in their care and the belief God *will* care for the cat on the street, are simultaneously linked to beliefs, expectations, and a lack of animal welfare facilities. Unpreparedness may be related to cats being easy to obtain and the lack of readily available cat care information. Final exit abandonment is related to lack of information and misinformation concerning the export procedure, and costs also play a part. However, the normalised practice of cat abandonment by expatriates leaving on final exit has begun to be challenged.

Power shapes the structures and norms of society and as it weaves latently through society and culture it exerts influence through institutions, societal norms, beliefs, daily practices, and expectations (Nadesan, 2014), thereby influencing the treatment of cats. This study supports the call of anthrozoological scholars for the treatment of otherthanhuman animals as part of multispecies communities and speaks directly to Islamic principles regarding the compassionate treatment of otherthanhuman animals.

This research has contributed to the understanding of cat relinquishment in a previously under-documented geographical area, Saudi Arabia. It presents factors which contribute to cat abandonment as a basis upon which to formulate strategies to reduce abandonment and encourages the creation of policies to improve the lives of Saudi Arabia's humano-cat community.

'There is not an animal on earth, nor a bird that flies on its wings, but they are communities like you…' Qu'ran (6:38) ('Quranic Arab. Corpus - Transl.', n.d. in Linzey 2008).

Figure 12. Rescued KSA abandoned cats. Copyright participant photos.

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How could non-euthanasia shelters prevent stress-related behaviours to increase adoption rates of dogs?

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Animal shelters may uphold a non-euthanasia policy when striving to rehome healthy animals. However, long-term shelter life due to low adoption rates can lead to stress-related behaviours, which can harm animals' adoptability and cause overcrowding. The following literature review explores three possible approaches which could decrease stress-related behaviours in dogs: addressing their exercise (specifically, increasing their exercise with humans whilst also engaging in calm interactions to counteract excitability), offering various modes of sensory enrichment, and lastly, replacing pre-adoption dog-visitor interactions with video footage to limit dogs' daily exposure to unfamiliar humans. The existing literature suggests that implementing such simple interventions could effectively decrease stress-related behaviours in dogs, and therefore increase their adoptability. If true, this could minimise the use of euthanasia in animal shelters (where it is used to resolve issues of overcrowding or poor welfare), and a non-euthanasia approach to managing shelter animals can be applied more widely.

Keywords: overcrowding, non-euthanasia, stress, dogs, adoptability

Introduction

When the number of otherthanhuman animals (henceforth, animals) entering shelters exceeds how many are being adopted (referred to as 'overcrowding'), animals can suffer. Shelters at maximum capacity may refuse animals who are sick, senior, or judged as having poor adoptability (due to their temperaments or behavioural traits), which can contribute to them potentially suffering neglect, abuse, or abandonment by guardians (Turner et al., 2012). Other times, shelters may be forced to resolve overcrowding by euthanising animals who are judged as less adoptable than others (Mullen, 2015). Use of euthanasia to handle unmanageably high populations in shelters has been criticised for being an expensive and

ineffective method in the long-term (Ortega-Pacheco and Jiménez-Coello, 2011), and staff have been shown to struggle emotionally with the seeming 'senseless killing of healthy animals' when methods besides euthanasia – such as fostering animals out to temporary homes – appear unconsidered (Arluke, 1994: 147). If euthanasia is not the most justifiable means to handle overcrowding, then perhaps another approach could take its place.

Shelters may instead advocate a non-euthanasia policy, whereby euthanasia is reserved only for animals who cannot be rehabilitated (Lucich, 2005), such as those with untreatable medical conditions. In non-euthanasia shelters, low adoption rates can still cause overcrowding (Turner et al., 2012), but animals can also have inescapable poor welfare – diagnosed when an animal suffers fear, distress, or discomfort for example (FAWC, 2009) – from long-term shelter life. Typical environmental factors associated with shelters can include repeated interactions with strangers, alongside constant exposure to extreme noise levels and unfamiliar surroundings, and prolonged exposure to these stressors can create behavioural manifestations of stress, such as abnormal behaviours, general non-responsiveness, and particularly excessive barking in dogs (Protopopova, 2016). These stress-related behaviours not only indicate poor welfare but are also problematic for adoptability as they are undesirable to adopters – thus deterring them from taking an animal home (Protopopova et al., 2014). In a perpetual cycle, this strain on adoptability can prolong shelter life, which induces further stress and harms welfare, and thus continues to limit animals' likelihood of being adopted (Wells et al., 2002a) – overall, maintaining the problem of overcrowding.

Prolonged suffering may be quickly resolved through euthanasia when animals' welfare has been judged as significantly compromised (Cavalier, 2016). However, euthanasia does not just relieve suffering, it also destroys any hope for adoption. Considering that the most intuitive way to improve shelter animals' long-term welfare is by successful rehoming (Wells and Hepper, 2001), perhaps a non-euthanasia policy should be advocated since it strives to offer increased rehoming opportunities for more companion animals. It is vital to consider, however, that this policy will not singularly increase adoption rates; without care, a non-euthanasia policy can further perpetuate overcrowding and animals can suffer prolonged exposure to stressors without escape of adoption. Since shelter animals live in a human-controlled environment, if stressors are harming welfare and causing behaviours that reduce

adoptability – as suggested by Wells et al. (2002a) – then these shelters are obliged to apply this policy in conjunction with measures that prevent animals' suffering. If such interventions successfully reduce stress and consequently promote better welfare (and thus increase adoption rates, which can also prevent overcrowding), a non-euthanasia policy could be utilised more widely.

Following a brief experience of working alongside the dog (*Canis familiaris*) care team at a local non-euthanasia animal shelter, the following paper will explore how dogs' stress-related behaviours as a product of shelter life could begin to be overcome to improve adoption rates. Preventing undesirable stress-related behaviours will be emphasised in this discussion because they are not only related to the perceived adoptability of shelter dogs, but can also serve as reliable indicators of stress (Hiby et al., 2006), and thus compromised welfare which may otherwise potentially warrant euthanasia. Observing changes in individual behaviours can indeed reflect whether dogs are suffering in response to environmental stressors (Marder, 2015), and this may serve as a suitable approach in shelter circumstances because they are often underfunded (Kim, 2018), and other measures for stress (such as physiological readings) can require significant expense and expertise to conduct and analyse (Young, 2011). Something to consider is that because there are many stressors within shelter environments, to which each dog will respond individually, it may be difficult to determine which aspects of shelter life impact dogs' welfare (Cafazzo et al., 2014). Accordingly, this report will cover a variety of approaches to differing potential stressors, with the aim that there will be at least one effective solution to prevent stress-related behaviours for each dog. When attempting to overcome stressors to improve welfare, positive and enriching influences matter (Yeates and Main, 2008), and Menor-Campos et al. (2011) recommend that social contact and exercise/enrichment should ideally be considered when aiming to improve animal welfare. As per this suggestion, the following discussion will explore reasonable means to address exercise and enrichment opportunities, as well as dog-visitor interactions during pre-adoption procedures, to prevent undesirable behaviours indicative of stress, and enhance adoptability.

How may shelter dogs' stress-related behaviours be prevented?

Exercise

An initial measure of preventing stress could be to ensure shelter dogs receive enough physical exercise, which has been positively correlated with increased adoption rates (Menor-Campos et al., 2011). Interestingly, the additional presence of shelter workers whilst dogs exercise appears to further mediate stress reduction, perhaps because positive contact with humans decreases dogs' stress responses in novel surroundings (Coppola et al., 2006). Shiverdecker et al. (2013) implemented a short 30-minute daily game of fetch between dogs and shelter workers, who also engaged in some training where dogs received a food reward and praise for following basic commands. Contrary to dogs who exercised in isolation, these dogs showed significantly lower levels of cortisol (a hormone indicative of stress; Willen et al., 2017) and reduced time spent panting and exhibiting tongue protrusions (behavioural markers of stress for this study) immediately after the play session when compared to measurements taken before play. Moreover, these dogs also vocalised (an undesirable behaviour for adopters; Protopopova, 2016) significantly less than those who exercised in isolation. This could be because having a human partner is more engaging than exercising alone, meaning they can work off their energy more effectively as they were motivated by play. Additionally, training is mentally tiring (Book and Smith, 2006), and receiving rewards for following commands can also lower stress and induce relaxation in dogs (Rooney and Cowan, 2011) – something else which the isolated dogs did not experience. Focussing on tiring shelter dogs out in short, intensive exercise opportunities (with active engagement from a play partner) may effectively lower stress responses and contribute to increased adoption rates; to maximise protection against stressors' effects on dogs' welfare, these interactions should begin as soon as dogs arrive at the shelter (Coppola et al., 2006).

Though it may seem straightforward that sufficiently tiring exercise could promote adoption rates, calm interactions between dogs and shelter workers could be suggested as an additional measure to prevent over-excitement (Protopopova et al., 2018). Protopopova and Wynne (2014) found that 27% of adopters chose not to rehome dogs who appeared to be 'over-active' (for instance, due to barking or jumping more than others), and Protopopova et al. (2018) suggested that dogs can learn to associate humans with play and exercise, which elicits excitement when they approach the kennels. Protopopova et al. (2018) advised that to

override this association, dogs should also engage in less exciting interactions with shelter workers so that they cannot reliably predict that humans warrant over-excitability. In their study, dogs who received a regular exercise routine alongside 15 minutes daily of calm interaction (where an experimenter sat in a room with a dog but totally ignored them while calmly reading a text out loud) showed significantly fewer undesirable behaviours (such as excessive barking). Dogs who instead received 15 minutes daily of intensive exercise alone (either running on the leash or engaging in active play such as playing fetch with a person) did not show as promising results.

Calm interactions may successfully prevent learned excitement related to the shelter workers who typically exercise the dogs. However, Protopopova et al. (2018) also noted that although dogs following the calm condition did exhibit stress-related behaviours less frequently, they did also occasionally behave in a way construable as asocial and undesirable to adopters (through non-responsiveness by spending time at the back of the kennel or facing away from visitors). Considering affiliative behaviour can contribute to a strong human-dog bond (Payne et al. 2015), this is understandable: limited interaction could harm adoptability when adopters are seeking a social companion. To avoid damaging adoptability, Protopopova et al. (2018) suggested that shelter workers should engage in calm interactions at the end of the day when dogs are no longer expected to interact with potential adopters. However, this may not be the most responsible solution to this problem – it neglects to consider that dogs are inherently social animals, who are often more interested in interactions with humans than their own species (Tuber et al., 1996). Plus, these interspecies interactions greatly benefit dogs; they may increase dogs' oxytocin levels (a hormone related to affiliative behaviour and bonding; Odendaal and Meintjes, 2003) which has also been related to lowered stress levels observed through reduced cortisol levels and blood pressure (Uvnäs-Moberg, 1998). Additionally, it reduces opportunities for dogs to learn how to behave appropriately with humans in a way that could be more desirable to adopters. It is crucial that dogs are not discouraged from seeking human contact in a bid to limit the potential excitability related to play and exercise.

Lessening the propensity to become over-excited due to an association between shelter staff and exercise is logical, but totally ignoring dogs is not recommended. Dogs' interest in human contact should be encouraged, whilst learning that humans can signal

calmness. For example, Shiverdecker et al. (2013) also studied a condition in which dogs were encouraged to lie down next to an unfamiliar human, who massaged dogs' muscles in the lower neck and shoulders whilst speaking calmly. Interestingly, these dogs later showed even fewer vocalisations than dogs in the play/training condition. The effects of calm tactile contact may be explained by increased levels of oxytocin (which can occur as soon as three minutes into tactile interaction), but dogs may also experience significantly elevated cortisol levels 15-30 minutes after contact is initiated (Handlin et al., 2011). It is therefore advised that calm interactions which involve continuous contact should be limited to only 15 minutes for optimum effect. Protopopova et al.'s (2018) case for training dogs to associate humans with calmness to override excitability is well-intentioned, but an asocial outcome must be avoided, not just for the sake of dogs' welfare (as fewer social interactions limit bonding and opportunities for potential stress reduction), but for adoptability. A sufficient daily exercise routine should be complemented by calm, affiliative interactions with shelter staff. By also teaching dogs to associate humans with calmness alongside a sufficient exercise routine, shelter dogs' welfare may not only be improved through stress reduction but may also exhibit even fewer undesirable stress-related behaviours, which could enhance adoptability.

Enrichment

Thirty minutes of exercise alongside calm interactions can be beneficial for minimising stress-related behaviours, but shelters are notoriously understaffed (Colby et al., 2011), so dogs may therefore only exercise for small portions of their day (Morrison et al., 2013). As such, further enrichment opportunities (stimuli added to an animal's environment to enhance their welfare; Shepherdson, 1998) should be provided for dogs' kennels. Compared to those living in more barren environments, dogs who have toys in their kennels have been judged as more adoptable (Wells and Hepper, 1992), perhaps because toys can protect against stress-related behaviours. Shelters may utilise rewarding food-filled toys (Herron et al., 2014), and those that involve treats or food are recommended; dogs may spend as much as a quarter of their time interacting with chewable toys (Hubrecht, 1993). These toys are associated with reducing stress-related behaviours, such as barking, and an increase in such behaviours when taken away (Schipper et al., 2008). This could be due to increased neuronal activation of dopamine (a neurotransmitter associated with how rewarding a stimulus is; Wang et al.,

2001) on receiving food (Roitman et al., 2004), which has also been linked to stress reduction (Field et al., 2005). Interestingly, if dogs also do not have the opportunity to perform specific actions (such as problem-solving) to achieve their food, it may reduce the value of the reward, and they can lose interest in the enrichment item sooner (Travain et al., 2016). McGowan et al. (2014) found that dogs displayed increased behaviours related to positive affect, such as tail wagging, when they could only receive food rewards for executing a specific task (and increased frustration and reluctance to engage in a task when there was no positive outcome), rather than receiving a reward for no effort. Problem-solving enrichment may improve dogs' welfare, and receiving rewards for interacting with challenging toys may reinforce this behaviour. Moreover, if dogs continue to utilise toys as stress relievers, it could improve adoptability as it helps to protect against behavioural manifestations of stress.

In addition to rewarding toys, Graham et al. (2005) suggested that olfactory stimulation may serve as a valuable form of enrichment for shelter dogs, due to their powerful olfactory acuity (Horowitz et al., 2013). Graham et al. (2005) found that four hours daily diffusion of stimulating scents (such as peppermint or rosemary) during shelter visiting hours increased vocalisation, and suggested that additional mental stimulation could initiate abnormal behaviours (such as stereotypy, an indicator of poor welfare which represents animals' prolonged, repeated attempts to cope with stressors; Mason, 1991) in dogs who already show hyperactivity without release. If stimulating scents induce stress-related behaviours adopters find undesirable they must be avoided, as they may prolong exposure to stressors and perpetuate a possibility for poor welfare for shelter dogs. In contrast to these stimulating odours, Graham et al. (2005) found that dogs reacted extremely positively to odours of lavender (and to a lesser degree, chamomile). These scents seemed to induce increased relaxation, as dogs spent more time resting and significantly less time barking. These specific scents have sedative properties (Moss et al., 2006), and thus act as successful forms of olfactory enrichment because they protect against the extreme psychological stimulation of shelter environments, which dogs find stressful (Tuber et al., 1999). The periodic presentation of these odours has the potential to relax dogs in a stressful environment and may therefore be advantageous for adoptability, as the calming effects can generally decrease undesirable behaviours such as excessive barking and may then foster

more positive perceptions towards the dogs (which could consequently contribute to successful rehoming).

A final sensory enrichment that may effectively reduce stress and increase adoption rates is auditory stimulation. Because shelters are already extremely noisy environments, with some reaching volumes of 125dB (Sales et al., 1997), the implementation of auditory enrichment must be done with caution (Wells, 2004). Six months of exposure to 100dB of noise has caused hearing loss in dogs (Scheifele et al., 2012), so shelters must avoid any auditory stimuli which may, in fact, increase stress and further elicit vocalisation. Wells et al (2002b) found dogs spent more time barking when exposed to heavy metal music than no music at all, and proposed that this musical genre is inducive of agitation and stress for dogs. In contrast, classical music elicited an increase in behaviours interpreted as relaxation (such as barking less and resting more often). The researchers suggested that these behavioural changes may be consequential of reduced stress and that music could thus support the increasing of dog adoption rates. As well as music, Brayley and Montrose (2016) found that playing audiobooks (recordings of books that may be read out loud by the author, celebrities, or amateurs; Colbjørnsen, 2015) for two hours increased resting and sleeping behaviours compared to other auditory stimulations (such as classical or pop music, or even music designed for dogs), and was also associated with reduced time spent barking compared to other auditory stimulations. Because dogs are highly social and their welfare is promoted by interactions with humans (Wells, 2004), Brayley and Montrose (2016) suggested that perhaps audiobooks are effective forms of auditory enrichment as they may serve as a substitute for human interaction. Audiobooks may provide an illusion of company, and therefore comfort, for dogs who are isolated in their kennels. Thus, auditory stimulation (in addition to olfactory stimulation and the encouragement of problem-solving behaviour using food rewards) could also be worthwhile to consider when aiming to prevent stress-related behaviours in dogs to increase adoption rates.

Pre-adoption dog visitor interactions

A final challenge for dogs' adoptability is the procedure of onsite browsing of available dogs. Potential adopters may only spend an average of 20-70 seconds considering a shelter dog before deciding whether to adopt them and the presentation of undesirable behaviours

during this time can seriously harm adoptability (Wells and Hepper, 2001). Being approached by strangers without the opportunity to either escape or interact due to containment can cause frustration in shelter dogs (Beesley and Mills, 2010). This, in turn, may cause abnormal behaviours potentially indicative of stress such as pacing, jumping, or spinning, but also vocalisations, which are not only undesirable to adopters but can also add to the stress of dogs who cannot even see visitors (Hewison et al., 2014). Visitors have been accused of treating shelters as more of a social excursion rather than an opportunity to adopt a companion (Wells and Hepper, 2001), and if true, this poses onsite pre-adoption browsing as a seriously unnecessarily problematic process. To increase adoption rates, it is vital that dog-visitor interactions are handled in a way that prevents inducing stress. Hewison et al. (2014) studied the effects of limiting visitor access to kennels for two weeks on dogs' welfare and found that, compared to pre-intervention, dogs were significantly less vocal and spent less time engaging in locomotive or repetitive behaviours (suggestive of experiencing increased relaxation, as such behaviours have previously been indicative of stress and poor welfare; Wells et al., 2002a). The authors suggested that (as noted by Beesley and Mills, 2010) it was adopter interactions that elicited frustration and behavioural markers of stress in dogs, and hence were reduced because of the restrictions in visitation. If these undesirable behaviours during the pre-adoption process may, in fact, be evoked by adopters themselves, Hewison et al.'s (2014) findings may imply that restricting these interactions can not only greatly benefit welfare, but also adoptability.

If adopters are prevented from visiting a shelter to view dogs at their own leisure, then another pre-adoption procedure must take its place. One approach to initially introduce adopters to dogs without stressful implications could be through photographs on online profiles; these provide adopters the chance to observe the phenotypic and morphological traits of dogs that they find desirable (such as coat colour or floppy ears; Nakamura et al., 2020) without being deterred by the presence of undesirable behaviours. Onsite viewings may be useful because dogs' gazing at humans has been indicative of sociability and thus positively correlated with adoptions (Protopopova et al., 2012). However, Lampe and Witte (2015) found that dogs' direct eye contact with the camera in photos (alongside higher photographic quality) also positively correlated with quicker adoption times, so onsite viewings may not be the only way to create this effect. The researchers suggested that initially

introducing adopters to dogs through high-quality photos can be a cheap and effective means to improve adoption rates and overcome shelter overcrowding – however, it can be difficult to convey dogs' behavioural traits through photos. Given how important these traits are to facilitate successful rehoming (as compatibility between adopters and dogs' perceived personality and behaviour have been related to retention of adopted dogs; Neidhart and Boyd, 2002), this requires acknowledgement. Sociability and friendliness in interactions are two important traits to adopters (Weiss et al., 2012); perhaps then, video footage that shows how dogs can exhibit these traits when they are not under the stress of confinement to a kennel can also supplement dogs' online profiles. Compared to viewing dogs in photos, adopters have judged the same dogs in videos to have significantly more desirable traits (such as playfulness, trainability, and intelligence) and were less often judged to have undesirable traits of being unsociable, dominant, or aggressive (Pyzer et al., 2017). Perhaps this procedure may be beneficial for adoptability.

Using online videos to promote adoptability could greatly benefit dogs' welfare. Besides reducing the repeated stressful and frustrating exposure to strangers during pre-adoption interactions, needing to video dogs' desirable behavioural traits provides the shelter with additional reason to encourage dogs to have regular interaction with both conspecifics and humans. The value of affiliative human-dog contact has already been covered, but its use for video footage further reinforces its recommendation. For example, Weiss et al. (2012) found that unlike seeing dogs through cage doors, direct contact allowed dogs to exhibit behaviours of wagging their tail, jumping/climbing, licking, and approaching/greeting the adopter, and the authors suggested that these behaviours were significant determiners of successful adoptions. This positive direct interspecies contact can not only be showcased in online videos but may also later benefit adoptability when visitors meet dogs they consider adopting, as they may appear to be more sociable and friendly. This approach may not only prevent dogs' exposure to shelter stressors and improve their welfare by encouraging regular affiliative interactions with humans outside of the kennel, but it may also potentially increase adoption rates by promoting sociable and friendly behaviours in videos and once dogs and adopters meet.

Regular interspecies contact is essential, but it is also important to consider the value of dog-dog interaction for improving and demonstrating sociability. Shelter dogs who have

little direct conspecific contact can exhibit increased signs of stress such as barking (Hetts et al., 1992), and compared to male dogs who are not isolated, isolated males may behave aggressively towards same-sex conspecifics during interaction (Beerda et al., 1999). Considering sociability is an important desirable factor for successful rehoming, this effect must be avoided; introducing dogs to play sessions with conspecifics may overcome these problems. Dogs have exhibited fewer stress-related behaviours following play sessions involving as few as three dogs, and have shown reductions of in-kennel behaviours such as pacing and barking (Johnson et al., 2013). Videos can offer a more accurate opportunity for adopters to observe dogs' behavioural traits; removing the stressor of frustrating interactions between adopters and kennelled dogs may prevent the exhibition of undesirable stress-related behaviours. Furthermore, dogs' sociability may be improved by encouraging engagement in social behaviours with both humans and other dogs for video footage, which can further increase adoptability. To prevent stress and increase adoption rates, the use of online videos may have merit over onsite browsing for preliminary adoption processes.

When utilising videos to increase adoptability, shelters should be careful of the footage they use. Footage that shows dogs being disobedient or overactive may be as undesirable as stress-related behaviours, which can be equally harmful to adoptability. However, considering the importance of compatibility between adopters and dogs' traits for successful rehoming (Neidhart and Boyd, 2002), it is essential that although videos positively reflect dogs, they also accurately represent them. Incompatibility puts dogs at risk of being returned to the shelter, which not only perpetuates overcrowding but also continues to induce prolonged stress in dogs related to shelter life. It is suggested that guardian expectations play a key role in successful rehoming (Shore, 2005), so when the amount of work required to care for dogs exceeds guardian expectations, they may be more likely to return dogs to shelters (Marston et al., 2005). Providing adopters with some knowledge through videos of how they should expect to engage in some training with dogs may be required to reduce the risk of shelter returns (Pyzer et al., 2017). Nonetheless, with an accurate but positive approach, perhaps video footage may indeed be a beneficial avenue for shelters to enhance the adoptability of dogs, as they can offer adopters a fuller picture of dogs' behavioural traits, which photographs cannot. By first introducing adopters to dogs through photos and videos can eliminate the constant stressor for dogs of being approached

by strangers without the ability to escape this frustrating encounter, whilst still providing adopters with an opportunity to browse possible dogs for adoption without being deterred by undesirable behaviours they can inadvertently evoke.

Conclusion

Administering euthanasia steals the chance of rehoming from animals, but so can their inability to escape stressors that harm their adoptability. Though non-euthanasia shelters offer animals a wider opportunity for rehoming, such a policy must be responsibly applied to prevent inadvertently causing harm overall. As per Menor-Campos et al.'s (2011) suggestion, this report has focussed on the influence of exercise, enrichment, and social contact for preventing stress-related behaviours in dogs, to explore how adoption rates may be increased. Generally, it can be concluded that the existing literature promisingly exemplifies that simple interventions (such as exercise with humans, various types of enrichment, or replacing pre-adoption dog-visitor interaction with video footage) may effectively prevent stress-related behaviours which can harm adoptability. The success of such interventions could not only greatly benefit the rehoming of shelter dogs who – with reduced stress levels and thus improved welfare – can have increased adoptability but may also have wider benefits too: for overcrowding. For instance, staff will not be required to wrestle with the emotional toll of administering euthanasia to healthy animals so frequently, and other animals who require shelter care may not be turned away so often. Though this report has focussed exclusively on dogs, a positive outcome from these interventions could offer scope to explore how these successes could also be found for other shelter animals too, such as cats (*Felis catus*). If shelters can successfully implement stress prevention interventions that improve welfare and consequently increase adoption rates, problems of overcrowding could begin to be overcome without reliance on euthanasia. Under such circumstances, a non-euthanasia approach to animal shelters can be applied more widely, to be able to promise more shelter animals another chance at life.

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It just makes scents: Assessing the welfare of dogs in the shelter environment and proposing nosework to promote positive welfare

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An animal's living environment has great potential to impact their welfare, which is especially true of domestic dogs (*Canis familiaris*) in animal shelters. Thus, it is crucial to effectively evaluate their welfare by assessing their health, determining stress, and observing natural behaviours and affect. In this paper I examine how sheltering impacts the welfare of the resident dogs and review interventions in improving their welfare. Namely, interaction with humans has shown to decrease salivary cortisol levels. Even a 15 minute petting session can improve stress levels in a dog, and 20 minute training sessions can increase a dog's likelihood of adoption. Additionally, nosework activities may positively affect cognitive bias tests. Thus, this paper will focus on how short bouts of nosework may induce positive cognitive bias in shelter dogs. I propose this intervention to improve their welfare overall.

Keywords: shelter dog, animal welfare, nosework, scent work

Introduction

An otherthanhuman animal's (henceforth 'animal's') living environment has great potential to impact their welfare, which is especially true of domestic dogs *(Canis familiaris)* living in animal shelters. The word 'welfare' has many definitions: 'wellbeing' is a common synonym, although the use of 'welfare' in this paper will refer to 'the state of an individual in relation to its environment' (Broom, 1991: 4167). Common indicators of poor welfare include reduced life expectancy, impaired growth, abnormal behaviours, and immunosuppression. However, while suffering is indeed a sign of poor welfare, lack of suffering does not guarantee good welfare (Broom, 1991). Thus, the aim is not only to decrease poor welfare and suffering but to encourage positive experiences that can further improve welfare (Mellor and Beausoleil, 2015).

Animal shelters are a unique environment. Although they provide food, shelter, and veterinary care to adoptable dogs, they can also appear to negatively impact the dogs' welfare due to the stress of social isolation and novel surroundings and routines (Coppola et al., 2006). Thus, it is important to be able to effectively evaluate the animals' welfare. This can be done by assessing their health, determining stress using physiological and behavioural data, and observing their natural behaviours and affect (Fraser, 2009). This allows for intervention to subsequently improve their welfare. In many cases, a dog's shelter stay may be short-term, which is less of a concern because a stay of just six days, for example, in a shelter may not compromise a dog's welfare (Wells and Hepper, 1992). However, while some shelters report that their dogs find homes in a week or less, other shelters house dogs for up to five years (Wells et al., 2002). For that reason, it is important to prioritise the welfare of shelter dogs regardless of whether their situation is temporary or not. My aim in this paper is to review the impacts that sheltering can have on the welfare of resident dogs and review previous interventions in improving their welfare. I then propose my own ideas for interventions that may be helpful to incorporate into the shelter environment. My ideas will address the issue of poor canine welfare in shelters by integrating short bouts of nosework at the beginning of a shelter dog's stay. This has the dual benefit of not only being time-efficient for shelter staff but also harnessing natural canine behaviours to improve their welfare overall.

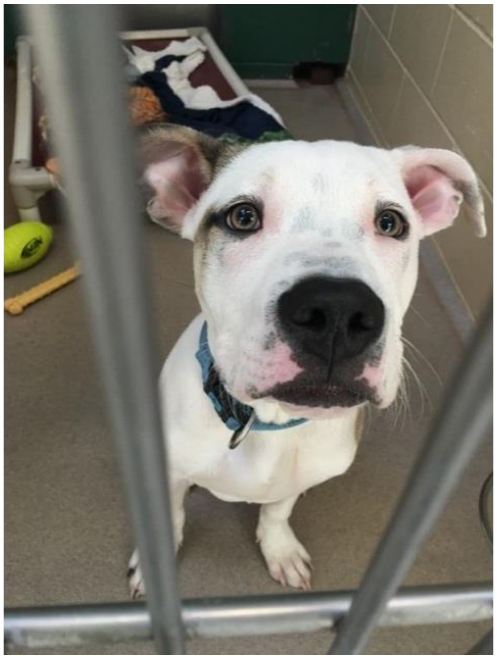

Figure 1: A dog inside his enclosure in an animal shelter. Photo taken by author, August 2016.

Animal shelters: Background information

There is great demand for animal shelters, both for dogs whose guardians relinquish them and for free-ranging dogs from the street (Miklósi, 2014). It is estimated that if enough facilities were available, 5–10% of the total dog population would live in shelters, meaning 4–5 million dogs in the United States alone (Marston et al., 2004). Unfortunately, due to high demand, animal shelters also face many challenges. While they offer a very important service to communities and to the dogs themselves, they often lack the financial resources and sufficient staff to give the dogs an appropriate environment. Many shelters end up being overcrowded, understaffed, and underfunded (Turner et al., 2012). Though the intentions are good, this can result in compromised welfare for the dogs living there (Dalla Villa et al., 2013).

Though animal shelters are all a little different, there are general trends true of many shelters. Typically, the dogs live individually in enclosures, though there are many variations to the enclosures. Animal shelters may house their dogs in outdoor kennels, indoor kennels with or without an outdoor run, or individual rooms with an indoor area and an outdoor run (Arhant and Troxler, 2014). Most shelters feed their dogs either once or twice a day and exercise them once or twice a day as well (Normando et al., 2014). Employees and volunteers prioritise the welfare of the animals as best they can. However, it is a stressful environment that can take a toll on its residents. In addition, many shelters are overrun with animals and are understaffed (Turner et al., 2012). The dogs living there will possibly experience stress from many different sources, which can subsequently have a negative impact on their welfare. A veterinarian or an individual trained to understand animal behaviour and body language can observe these welfare impacts by examining the dogs' physical health, natural behaviours, emotions and mood, and abnormal behaviours (Fraser, 2009). I will provide details of these techniques in the following sections.

Welfare challenges in the shelter environment

One very crucial welfare challenge of the shelter environment is the negative impact that it can have on the dogs' physical health. Many dogs enter shelters already carrying some sort of infection or disease, but it can be difficult for understaffed shelters to see the warning signs in their new arrivals (Tupler et al., 2012). Since many of the illnesses are contagious and

difficult to detect, it is not uncommon for dogs to leave the shelters with some type of ailment that they contracted while staying there. For example, parvovirus, vomiting, and diarrhoea are common in puppies housed in shelters, and a cough is common in adult shelter dogs. In addition to the obvious health implications, this can also result in adopters returning the dog to the shelter (Wells and Hepper, 1999). These health problems have consequences for the dogs' welfare in the shelter itself since so many dogs leave the shelters with illnesses. But even worse, if the adopter returns the dog, this further reduces the dog's long-term welfare and may expose more shelter dogs to the illness.

Another health factor that has implications for welfare is weight, specifically obesity. Obesity is a common nutritional disorder in dogs which can result in subsequent negative health effects, such as organ disfunction and cardiopulmonary disease, and can shorten the individual's lifespan (Mao et al., 2013). Shelter life can cause weight gain since the dogs have access to limited space, which restricts physical activity. They may also receive an unbalanced diet. In many shelters, all dogs receive the same diet regardless of individual differences, and the staff must feed whatever type of food they receive through donations. Therefore, many dogs end up eating food that is unsuitable for them, resulting in over half of shelter dogs being overweight (Ricci et al., 2007). This has negative welfare implications due to both the short-term and long-term health effects that are a result of chronic obesity.

While the impact of animal shelters on the physical welfare of dogs is an important one, animal shelters can also cause dogs to experience emotional and psychological impacts. An example of one such welfare concern is the high amount of stress that many dogs appear to experience while living in the shelter environment (Hennessy et al., 2020). When determining the cause of stress, it may be a better question of what in their environment does not cause stress. Sources of stress include exposure to novel surroundings, separation from social attachment figures (both human and not), and general disruption of their daily routine (Hennessy et al, 1997). The dogs may experience strange and loud noises, restraint, alteration of light-dark cycles, and loss of control in general (Hennessy et al., 1997). However, one of the greatest sources of stress for dogs in shelters may be social isolation from humans and other dogs. This can cause significant distress because dogs are extremely social creatures. They coevolved with humans and demonstrate this fact by being even more sensitive to our gestures than their closest relatives (wolves, *Canis lupus*) and our closest

relatives (chimpanzees, *Pan troglodytes*) (Udell et al., 2010). Thus, for many dogs, these social relationships with humans are extremely important, and they can suffer without them (Udell et al., 2010). Many shelters try to overcome this issue by providing enrichment and even placing some dogs into foster care. Unfortunately, though, many dogs will remain in the shelter with insufficient human interaction.

Nevertheless, there may be other, less-utilised methods to help provide dogs with the social interaction that they crave. While many shelters may be unable to give extra human attention, one method of providing more socialisation is to house the dogs with a conspecific. Although single housing may decrease the likelihood of aggression and the spread of disease, it can be detrimental for social animals like dogs. In fact, living alone or in pairs has a greater apparent impact on dogs than the size of their enclosures or the amount of exercise (Hetts et al., 1992). Dogs housed individually spend more time moving: they vocalise more, manipulate the enclosure barriers, and groom themselves more. Dogs housed in pairs, on the other hand, spend more time sleeping and less time vocalising (Hetts et al., 1992). Dogs living in pairs or groups seem to develop fewer behavioural problems and abnormal behaviours (common indicators of poor welfare) and often find adoptive homes more quickly than individually housed dogs (Mertens and Unshelm, 1996). Though shelter workers may be concerned about fights breaking out, behavioural rituals can end up alleviating most social confrontations (Mertens and Unshelm, 1996). Thus, social isolation has important implications, especially since most shelters house dogs individually (Arhant and Troxler, 2014). Housing the dogs in pairs or small groups could greatly improve their welfare and give them the social interaction that they need. In shelters where cohousing the dogs is not possible, separating the dogs into play groups for short periods of time is another option for providing much-needed social interaction and exercise (Johnson et al., 2013). Of course, caregivers must carefully determine which dogs are suitable for living with others, and whether any dogs truly prefer living alone. There are many dogs who would not be good candidates for cohousing. But the fact remains that this is a promising intervention that could make a great difference for the wellbeing of the dogs and could even make life easier for their caregivers as well.

Assessing welfare

With so many potential sources of stress in the shelter environment, assessing a dog's stress level is of utmost importance. There are many methods of doing this. Researchers often rely on physiological indicators of stress, such as measuring the stress hormone cortisol in the saliva, urine, or blood (Beerda et al., 1996; Coppola et al., 2006; Hennessy et al., 1997). They also often observe behaviour to determine if a dog is in distress. Researchers have also attempted using heartrate variability but have determined that using salivary cortisol with behavioural observations is the most accurate approach (Bergamasco et al., 2010). Researchers in the field often use one or a combination of these methods in order to ensure accuracy. These measures of physiological stress led to the important finding that stress is higher on days one to three of a dog's stay at the shelter; the cortisol decreases as the days go on (Coppola et al., 2006). This has crucial implications for shelter dogs as it demonstrates the importance of intervention during the beginning of a dog's stay. In fact, even a minimum of 15 minutes of close interaction with a person petting and speaking to them calmly appears to make a positive difference (McGowan et al., 2018). This demonstrates that even short amounts of time can potentially positively impact the welfare of shelter dogs. Additionally, many shelters tend to focus on the dogs who have been there the longest, but perhaps doing the opposite is more critical and worthwhile.

However, it is important to note that this decrease in cortisol over the length of a dog's stay in the shelter may not be due to habituation to the stressful environment, but the opposite; rather, it could be a result of chronic stress dysregulating the hypothalamic-pituitary-adrenal (HPA) axis (Protopopova, 2016). Thus, cortisol levels may indeed be lower because the dog is no longer stressed, but it could also be due to the HPA-axis entering a state of exhaustion (Hennessy, 2013). This possibility highlights the importance of using a combination of methods to assess the stress levels and welfare of animals rather than relying on just one measure. A holistic approach makes an accurate assessment more possible and increases the likelihood of interventions being effective.

In addition to stress, there are many other indicators that provide information about a dog's welfare. One of these indicators is the dog's affect, or their emotions and mood. This is an important sign of welfare since a positive affect correlates with less stress and good welfare, while a negative affect can reveal compromised welfare (Ahloy-Dallaire et al., 2018).

However, while humans can simply verbalise their emotions, it is not so simple with other species. Indeed, we must rely on external expressions and displays in order to interpret how the animal may be feeling (Paul et al., 2005). Behavioural measures and body language can be useful and accessible for assessing this. For example, body language such as paw lifting, lip licking, body shaking, and yawning often increase in response to stressful situations (Part et al., 2014). The benefit of using body language instead of physiological data is that it is non-invasive, readily available, and inexpensive, though it is necessary for observers to have training in canine body language and materials to record the observations. However, with some training in canine body language to ensure consistency across observers, a Qualitative Behaviour Assessment (QBA) can be an effective method. QBAs are an integrative approach to describing an animal; it is a way of viewing an animal's behaviour as an expressive body language that can help to assess an animal's quality of life (Wemelsfelder, 2007). A QBA used to describe a dog might consist of a list of adjectives such as 'anxious' and 'playful' to assess their positive and negative emotions. These descriptions are a way of capturing the animal's demeanour as a whole (Arena et al., 2019).

Another common method of assessing the affect of shelter dogs is by conducting a Stranger Approach Test, which consists of a stranger walking up to the front of the kennel and categorising the dog's reaction (Arhant and Troxler, 2014). This is another method of assessing a dog's emotions and mood and determining whether people are a source of stress. Both of these methods are common approaches to what shelter staff are likely already doing: assessing how dogs might feel based on how they are acting. Using a QBA or conducting a Stranger Approach Test would ensure consistency across observers in order to assess the dogs and improve their welfare.

QBAs and Stranger Approach tests can benefit both the caregivers who use them and the shelter dogs themselves. Along with providing a method of assessing that is intended to improve welfare, QBAs require the observer to view the animal as a sentient agent (Wemelsfelder, 1997). The nature of this method encourages observers to acknowledge the personality and emotionality of individual animals, providing a direct analysis of an animal's lived experience rather than applying a one-size-fits-all approach to every individual (Wemelsfelder, 2007).

It is also possible to conduct formal behavioural experiments in order to determine the mood of dogs. Cognitive bias tests present a way to test the 'pessimism' or 'optimism' of an individual. Emotions can influence information processing, and experiments have shown that animals in a negative state view ambiguous stimuli unfavourably in the same way that humans do (Harding et al., 2004). Duranton and Horowitz (2019) provide an example of using cognitive bias tests with dogs. Their experiment first consisted of a training period in which they had dogs sit with their guardians three metres from a predetermined location. They then placed a bowl either to the right or left of this spot: the bowl on the left, or 'positive' side, contained food, while the bowl on the right, or 'negative' side, was empty. Once the dogs could successfully discriminate between the positive and negative sides (i.e., they did not approach the empty bowl on the negative side), they began the test trials. The test trials consisted of placing an empty bowl in an ambiguous location between the positive and negative sides. They then measured the dogs' latency in approaching the ambiguous location. Researchers associated a low latency with a positive emotional state and optimistic reaction, while higher latency may indicate a pessimistic reaction, or a negative emotional state (Duranton and Horowitz, 2019). An example of a cognitive bias test in action is that shelter dogs who display more separation-related stress behaviours have more pessimistic responses during a cognitive bias test (Mendl et al., 2010). Since mood, in contrast to emotions, is long-lasting, this is very important for the dogs' welfare and has great potential to affect it positively or negatively. Cognitive bias tests provide a method for testing animals' moods. This can then guide interventions in order to improve their welfare.

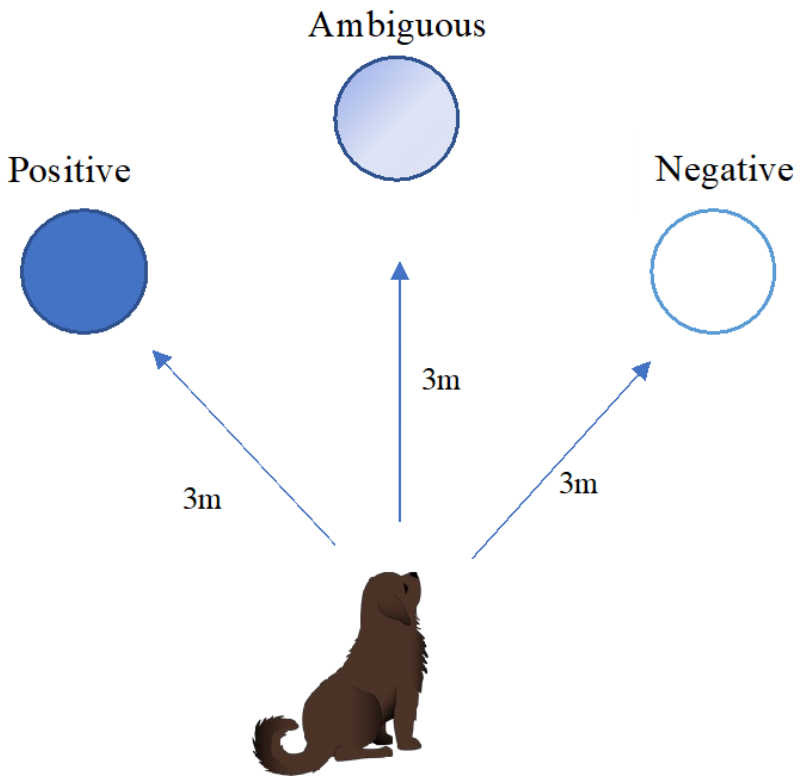

Figure 2: The layout of a cognitive bias test. Diagram created by author using Microsoft Word and openclipart.com.

Another approach that helps to evaluate the welfare of shelter dogs is to observe the presence of natural behaviours. After all, the absence of negative behaviours and stress does not necessarily indicate good welfare. The positive aspects of sentience, such as rewards and pleasure, are also critical to addressing animal welfare (Balcombe, 2007). It is also important to observe what natural behaviours the animal is engaging in. The inability to perform natural behaviours due to restraint or lack of stimuli is a major source of compromised welfare in captive animals. Thus, the presence of natural behaviours can demonstrate good welfare (Schipper et al., 2008). For instance, just as the Stranger Approach Test gives data on a dog's affect, it also provides an example of a dog's natural behaviours. When a new person appears in front of their kennel, dogs may spend most of their time at the front of the enclosure, facing forward while standing and wagging their tails. Many dogs also engage when the person gives them attention. They might paw at the person, paw and jump at the kennel door, play bow, and bark (Protopopova et al., 2014). These normal behaviours can indicate that a dog has relatively good welfare, as compared to dogs who hide at the back of their enclosure or are otherwise disengaged. However, dogs who approach a person at the gate can also be

stressed, so it is not a complete indicator of good welfare in itself. Other observations and techniques, such as noting subtler body language cues, are necessary for understanding the complete picture.

A well-known natural behaviour that dogs possess is sniffing. Dogs have a highly developed sense of smell and live in an olfactory world rather than a visual one. In fact, canines have 300 million scent receptors in their noses, compared to 5 million in humans (Else, 2020). Their method of sniffing is also adaptive in itself since within the nose, olfactory and respiratory airflows separate into different paths (Craven et al., 2010). Many dogs have jobs that require them to use their noses: they can learn to detect drugs and bombs and track people. In fact, tracking dogs can reliably determine in which direction a missing person went by following only five of their footsteps (Hepper and Wells, 2005). However, even dogs who are not specially trained for specific tasks can benefit from the opportunity to use their noses. Shelter dogs may benefit from olfactory stimulation that provides enrichment, for example, with the use of essential oil-scented cloths. This can lead to a decrease in behaviours that indicate stress, thus improving their welfare (Binks et al., 2018). Another way to encourage dogs to sniff and forage is to do nosework, which means giving them an activity in which the goal is to use their nose to find something that is hidden (Horowitz, 2016). Dogs who have the opportunity to do nosework benefit from a more positive affect and are more optimistic, according to cognitive bias tests (Duranton and Horowitz, 2019). This offers a different method for improving the welfare of shelter dogs and highlights the importance of giving them the opportunity to exercise their natural behavioural repertoire.

Figure 3: A dog exercising his natural sniffing behaviour. Photo courtesy of Pixabay/PDPics

Play is another natural behaviour that can indicate good welfare. Dogs might engage in solitary or social play, and many will play with a variety of toys (Pullen et al., 2010). Though play preferences vary from dog to dog, toys can be an effective way to make a kennel enclosure more interesting and promote natural behaviour. Adding enrichment in the form of food-dispensing toys can combine a dogs' inclination to play with their natural behaviour of sniffing to find food. Additionally, providing food-dispensing toys can decrease barking behaviour in kennelled dogs and stimulate natural behaviours (Schipper et al., 2008). It also gives dogs more autonomy and control over their food, which is a key aspect of good welfare (Maple and Perdue, 2013).

Just as normal behaviours and affect are useful indicators of welfare, so too are abnormal behaviours. Many species experiencing poor welfare cannot cope successfully with their environment; this may result in fewer occurrences of species-typical behaviour, less behavioural variability, and more occurrences of abnormal behaviour and stereotypies (Protopopova, 2016). A stereotypy is a behaviour pattern that is repetitive, invariant, and has no obvious goal or function (Mason, 1991). Of great interest in the study of canine welfare are whole-body stereotypic behaviours. These include pacing, circling, bouncing, and tail chasing (Protopopova, 2016).

The majority of shelter dogs engage in some type of repetitive behaviour in response to arousing stimuli. Many dogs bounce when care staff are near or if they see food preparation happening. It is critical to note that repetitive behaviours are not inherently problematic. The most concerning repetitive behaviours are those that occur with no apparent arousing stimuli present. This is more characteristic of a stereotypy, especially since a subsequent decrease in cortisol indicates that the behaviour is a coping mechanism in the face of stress (Denham et al., 2014). Thus, repetitive behaviours due to arousing stimuli can be completely normal; those that occur with no stimulus more often indicate stress. As always, observers must take behaviours in context and view the situation as a whole to ascertain the cause of a behaviour.

Abnormal behaviour can be an important indicator that the environment is not meeting an animal's needs. While some anxiety and fear-related behaviours, such as escape attempts and jumping, can decrease throughout the course of a dog's stay at the shelter, other frustration-related behaviours may increase. Among others, these can include bed

chewing and play bouncing, and may especially happen in environments that do not provide outlets for their behavioural needs. One of the most common abnormal behaviours in the shelter environment is excessive barking (Stephen and Ledger, 2005). These behaviours can all indicate stress, which has negative implications for welfare. Dogs who engage in these behaviours may also be less attractive to adopters, which can result in a longer shelter stay (Protopopova et al. 2014).

Another important behaviour to observe is whether a dog is resting throughout the day. In fact, dogs who spend more time resting and sleeping during the day display more optimism in cognitive bias tests. They also engage in fewer repetitive behaviours and spend more time appearing relaxed (Owczarczak-Garstecka and Burman, 2016). Thus, a dog's resting behaviour can also possibly provide important insight into their welfare, as the ability to rest during the day in a busy shelter environment could indicate good welfare. Additionally, a dog who was previously unable to rest during the day but now is able to, could be demonstrating habituation to the environment, which could show that the dog's welfare has improved. However, it is important to note that excessive resting behaviour may indicate learned helplessness, which can happen when an animal has little perceived or actual control over their environment (Maier and Seligman, 1976). This often looks like dogs 'giving up' in certain situations, which can manifest as sleeping (Seligman et al. 1968). Thus, like all other behaviours, shelter staff and volunteers must take the entire context into account when observing sleeping behaviours in shelter dogs.

One final note is that, while many behaviours and emotional expressions are present across dogs as a species, it is important to view each dog as an individual. There can be considerable variation in what is considered normal behaviour, both between breeds of dogs and between individuals of the same breed (Hart and Hart, 1985). Indeed, an example of a difference that can exist between individual dogs is their reward responsiveness, or whether they respond more readily to a food reward or a toy reward (Gerencsér, et al., 2018). For instance, while a food puzzle may be an excellent enrichment item for one dog, other dogs may prefer to find toys hidden around their enclosures. Thus, for shelter staff and animal caretakers, welfare decisions must be made with an individual dog in mind.

Proposed intervention

Clearly, dogs in animal shelters can potentially suffer many welfare issues. They often have health problems such as contagious illnesses and obesity and may suffer high stress (Hennessy et al., 2020; Mao et al., 2013; Wells and Hepper, 1999;). While there are numerous sources of stress in a shelter environment, one of the main sources is social isolation from humans and other dogs (Udell et al., 2010). A holistic approach to determining the dogs' welfare is necessary. A researcher can do this by measuring physiological stress, performing cognitive bias experiments, and observing natural behaviours, abnormal behaviours, and body language (Fraser, 2009). The many methods of determining the welfare of shelter dogs reflect the various ways that stress can manifest.

Fortunately, there are several promising solutions that could help to ameliorate this distress, including some environmental modifications that could help the dogs with minimal effort from staff or volunteers. One of these changes that could make a difference is housing the dogs with one or more conspecifics. This has been shown to decrease stress-related behaviours even more so than enclosure size, and results in reduced stereotypies and more resting (Hetts et al. 1992; Mertens and Unshelm, 1996). Another simple environmental change that can improve the welfare of shelter dogs is to provide food-dispensing toys. This would help to keep the dogs occupied and could decrease the abnormal behaviour of excessive barking (Schipper et al. 2008). Importantly, this also gives dogs the opportunity to control their food, which is a very crucial facet of improving welfare (Maple and Perdue, 2013). Both of these changes have the potential to positively impact the dogs and improve their welfare, but with the added benefit that they require minimal additional time and effort from shelter staff and volunteers.

Social interaction with humans is another intervention that has shown intriguing results. The good news, especially for crowded and understaffed shelters, is that it does not take much human interaction to make a difference. In fact, even a 15-minute petting session with a person can result in less stress in a dog, particularly when that time includes close interaction with a person who is petting them and speaking to them calmly (McGowan et al., 2018). Human interaction in the form of playing, grooming, petting, and training can also reduce cortisol levels in dogs (Coppola et al., 2006). Likewise, daily 20-minute training sessions can make dogs more likely to be adopted (Luescher and Medlock, 2009). These results are

extremely promising because they suggest that it may only take a short period of time to benefit the dog and help to decrease their stress. This information could help shelters to better instruct their volunteers and staff, resulting in shorter, but more frequent, socialisation sessions with their resident dogs. Subsequently, more individual dogs would benefit from more interaction and less stress.

With these previous studies in mind, my proposed strategy is to implement a socialisation programme for shelter dogs. This programme could include training, playing, and petting with people for at least 15 minutes each day, especially on days one to three of a dog's stay when their cortisol is the highest (Coppola et al., 2006). The short nature of these sessions would allow shelter staff and volunteers to interact with more dogs, meaning that more individual dogs would benefit from the programme. Additionally, administering the sessions on days one to three of a shelter dog's stay would help the dogs when they are at their most stressed.

Even more beneficial, however, would be to include nosework in these sessions. Sniffing is an important natural behaviour that can greatly improve the welfare of dogs. Indeed, nosework itself, or giving dogs an activity to find something that is hidden by using their noses, can lead to positive affect and a more optimistic mental state (Duranton and Horowitz, 2019; Horowitz, 2016). These sessions can be as simple as hiding treats around the dogs' enclosures for them to sniff out and find. Likewise, the sessions could be as involved as teaching the dogs to track a neutral scent, such as birch. The nosework sessions are adaptable depending on the capabilities of each shelter. Regardless, the short nature of these sessions, along with prioritising days one to three of a dog's stay, would potentially make it more doable for shelters that are overrun and understaffed. This strategy has the joint benefit of providing the dogs with much-needed socialisation and enrichment, hopefully increasing their likelihood of adoption, while also improving their welfare for the remainder of their stay in the shelter. Additionally, daily interaction with humans would provide shelter staff and volunteers with more information to share with potential adopters, helping them to make more informed choices and hopefully resulting in better adoption outcomes.

Though researchers have tested the benefits of these interventions individually, my specific plan of integrating nosework on days one to three of a dog's stay still requires testing and trials in the shelter environment. However, there does remain the ethical consideration

of experimentally testing this plan in real animal shelters. Due to the nature of experimental design, there will necessarily be a group of dogs in the control group who will not receive the treatment of nosework sessions. This is an issue due to the potential welfare benefits of engaging in nosework, and the missed opportunity for the dogs who do not get to participate. A potential alternative is assigning the control group to do basic obedience training, as Duranton and Horowitz (2019) did. In their study, the treatment group engaged in nosework, while the control group practiced heeling. Likewise, my experiment could mirror this setup so that all the dogs receive some form of interaction.

Conclusion

Clearly, there are many promising techniques that have the potential to enhance the welfare of shelter dogs. The methods highlighted in this paper serve to efficiently evaluate welfare issues and propose ways to decrease stress and promote natural behaviours in the shelter environment. Previous interventions for improving the welfare of shelter dogs include housing them with a conspecific, which may result in more resting behaviour and less vocalising (Hetts et al., 1992); spending 15 minutes petting the dog, which may induce more calm behaviour (McGowan et al., 2018); conducting training sessions, which may increase the likelihood of adoption (Luescher and Medlock, 2009); and engaging the dog in nosework sessions, which can increase positive responses on cognitive bias tests (Duranton and Horowitz, 2019).

My own proposed intervention involves introducing shelter dogs to nosework by encouraging them to use their nose to find something that is hidden (Horowitz, 2016). At the very least, I recommend introducing food-dispensing toys that require the dogs to use their noses to find the food and determine how to dispense it. This time- and cost-efficient method would encourage the dogs to engage in their natural sniffing behaviour while also giving them control over their environment, thus improving their welfare. For shelters with more time and personnel, however, conducting formal nosework sessions (for example, teaching dogs to track a neutral scent or hiding treats around a room) would be ideal. This could be an effective way to harness the dogs' natural behaviours, give them an outlet for their energy, and improve their affect and thus their welfare.

Whether a dog is in the shelter for six days or for six weeks, an animal shelter can be a stressful environment. It can cause both physical and psychological effects and take its toll on a dog's welfare. To combat this, my proposed intervention could help dogs experience decreased stress and positive welfare while they await their forever homes. In this way, countless dogs could benefit from less stress, improved welfare, and a better quality of life.

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Virtual animal lovers in South Korea:

'Lan-cable butlers', their practices, and affective networks

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In this study, I analyse the affective relationships between animal protagonists of online animal channels and their young fans, known as 'Lan-cable butlers' in South Korea. Residing primarily on YouTube and Twitter, 'Lan-cable butlers' actively intervene in the wellbeing of animals they follow online. Drawing on ethnographic research and in-depth interviews, I detail practices that virtual animal lovers perform to maintain relationships with animals online, such as policing the video content for hints of animal mistreatment and using kinship terms to deepen their relationship. Also, the article tracks how these practices bring about affective networks, which sometimes lead to collective actions, such as petitions. By examining the growing significance of animals in the lives of young adults who do not cohabit with animals themselves, I contribute to understanding the shifting ethics of human-animal socialities and their online mediation in South Korea.

Keywords: human-animal relationship, 'Lan-cable butlers', affect, animal channel, online spaces

Introduction

An Instagram message arrived from Hodu, who has been interacting with me on Twitter since 2014. 'I bought an official merchandise from the channel "One Woof, One Meow" and requested Mung's [main protagonist dog (*Canis familiaris*) from the channel "One Woof, One Meow"] fur!'. Hodu is an active otherthanhuman animal (henceforth animal) lover who consistently watches YouTube videos of 'One Woof, One Meow,' checks every update by following its Twitter account, and regularly purchases official merchandise from the channel. She spends at least six hours online on average every day. Although she does not spend all her time watching animal channels, she follows 15 animal accounts on Twitter, 62 Instagram animal accounts, and six YouTube animal channels. She is naturally exposed to animal pictures

and videos just by being on her social media. Her passionate love for animals might make us think that she is a person who lives with a companion animal. However, surprisingly, she has not lived with a companion animal for over 26 years.

The recent popularity of animal channels in South Korea has created new subjects and social keywords online. The term 'Lan-cable butler' is a new subject of human-animal relations that stems from the culture of the natural world, but can be seen as a unique culture online (Boellstorff, 2015: 18). '랜선' (lan-cable), which people now use as a prefix, is a non-standard term for the LAN (Local Area Network) cables that connect various computer devices. Adding the term 'butler' implies that guardians do not raise cats (*Felis catus*), for example, but serve them. People, therefore, call someone who looks out for the wellbeing of certain animals online a 'Lan-cable butler'. Like Hodu, 'Lan-cable butlers' constantly watch other people's companion animals, follow animal accounts on social media, and actively promote the accounts, and these activities are happening within online spaces.

In this paper, I aim to present and analyse the emergence and change of these 'Lan-cable butlers'' practices and the virtual relationship with other 'Lan-cable butlers' and animals online. Not only do they watch videos and follow accounts, but these young 'Lan-cable butlers' also actively participate in the growth of the animals and try to maintain their relationship with them in various ways. According to the Ministry of Agriculture, Food and Rural Affairs (2020), 27.7% of people in South Korea live with their companion animals. However, human-animal relationships created online have a significant impact on creating awareness of animals in society even though many people live in cities without having their own companion animals. By examining relationships formed online and analysing how they extend to offline relationships, I contribute to understanding the changing animal ethics and human-animal relationships in South Korean society.

According to Lim (2018: 6), modern urban civilisation has been created by expelling animals out of the city. Nevertheless, some animals were invited back into the human realm under the name of 'companion animals.' Until the 1990s, the proportion of people who regarded animals – mainly dogs or cats – as family members in South Korean society was low, and the name to call these animals was '애완동물' (pet) which, in Korean, implies that animals are instruments for human satisfaction. However, since 2006, the term '반려동물'

(companion animal), which emphasises the meaning of "companionship," has begun to emerge, and as of 2020, the term is widely being used. The treatment of companion animals and other animals living in the city has also been changing. From the 1960s to 1980s, rats scavenging for food led to a nationwide rat-catching campaign, highlighting the importance of cats. However, in the 1990s, when rats were no longer considered a social problem, the original purpose for cats diminished and the growing number of stray cats became a social problem. At first, the South Korean government captured and killed these stray cats, but since animal rights activists strongly opposed it, they started discussing how they could control the number of cats. Instead of killing these cats, the government started executing a plan of 'trap-neuter-release' (TNR) to control the population. Currently, “길고양이” (street cats) are considered beings with whom we should coexist.

This continuous change in human-animal relationships in society is also changing the direction of anthropological research. Many studies have been conducted on the importance of animals in anthropology, most of which centre on the physical function of animals (Harris, 1966: 51-59; Rappaport, 1967) or their figurative and symbolic significance (Douglas, 1957: 46-57; Evans-Pritchard, 1940; Geertz, 1972: 412-453; Levi-Strauss, 1963). Recently anthropologists have shifted the focus to human-animal relationships themselves, raising questions about the strict dichotomy between human and other animals (Ingold, 1994: 14-32). This change in research direction is more actively conducted as people increasingly consider companion animals part of a ‘family.’ Some researchers tend to think of companion animals as relatives and partners beyond the species barrier (Charles, 2014: 715-730; Haraway, 2008; Paul and Serpell, 1994; Serpell, 1996: 321-337). However, in many instances the 'personhood' of a companion animal has flexibility, and the level of personhood that people recognise in companion animals varies depending on the human family situation (Owens and Grauerholz, 2019: 96-119; Shir-Vertesh, 2012: 420-432).

Recent anthropological studies of South Korea have also started focusing on human-animal relationships. Primarily, as it became natural for South Korean people to consider companion animals part of the family, more studies focus on how this changed perception affects human-animal relationships. Ahn (2016) examines subjects who, by interacting with their companion dogs, create various social relationships around animals which help them act against the prevalence of human alienation in modern society. By researching South Korean

families living with companion animals, Lee (2017) suggests that companion animals are the 'youngest child' in most of these households, and human families were spending much affection, time, and money on them. Studies of animals that coexist with humans in cities are also prime subjects of anthropological research. By examining the shift in South Korea's social recognition of street cats as subjects of life and objects of care, Jun (2017) argues that the city business initiated to control the number of street cats does not allow street cats to live within the human city by being themselves; through biopolitics, the city government demands restructuring, recreating, or re-subjecting each species. These studies show that human-animal relations in South Korean society should be anthropologically analysed since coexistence with animals has become an essential social agenda.

Following the trend of these recent animal studies, my research analyses affective relationships created online. Many studies have been conducted through the lens of affect (Carlyle, 2019: 199-210; Govindrajan, 2018; Kockelman, 2011). Carlyle researches the relationship between a dog and a class of children and states that 'elucidating moment-to-moment child-dog interactions through the lens of affect theory attempts to materialize the invisible, embodied, "unthought" and non-conscious experience' (2019: 199). Affect resulting from relationships continues to have a massive impact on individuals. In this study, I focus on the effect of trauma that individuals experience. I draw on Berlant's (2011) and Cvetkovich's (2003) affect studies of trauma, Berlant's study of intuition (2011), and Masumi's study of threats (2010: 189-216) to examine what kind of human-animal relationships and practices are being created by the 'Lan-cable butlers' who are affected by past experiences.

This study distinguishes itself from the existing studies of human-animal relationships in that it focuses on relationships formed online. Several anthropological studies have shown how online spaces are natural for members and affect their lives (Boellstorff, 2015; Kim, 2018; Lee, 2012; Nardi, 2010). In particular, Boellstorff (2015) explains that what happens in the virtual world is 'real' and has a real influence on participants. According to him, 'it is human nature to experience life through the prism of culture, which means that humans have always been virtual beings' (2015: 21). Therefore, he suggests that anthropological research in the online space is possible. By watching animals online, 'Lan-cable butlers' affect and are affected by their relationships with the animals. Kuntsman presents the concept of 'cybertouch' to explain that 'past and current events can touch us through our computer and

mobile phone screens and can bring distanced experiences close quite literally, close to the skin; or by creating an immediate emotional response' (2012: 3). Online relationships that 'Lan-cable butlers' are forming are vivid to them and have a steady impact on their reality.

Methods

I conducted my fieldwork on online platforms to examine the affective relationships between 'Lan-cable butlers' and animals on animal channels, and the network and ethics created by those relationships. The preliminary research was conducted beginning in June 2020, and I collected data and conducted in-depth interviews from October 2020 to April 2021. I conducted participatory observation on YouTube, a video-sharing platform, Twitter, where 'Lan-cable butlers' can post their opinions and follow animal accounts to communicate directly, and Instagram, where people mostly upload photos. This study gained approval from the Institutional Review Board (IRB) of Seoul National University on October 27, 2020 (approval number IRB No. 2011/002-00).

Since its launch in 2008, more than 80% of all ages of people in South Korea use YouTube (Oh, 2020: Paragraph 1). As YouTube is now the most crucial video viewing platform, various videos have begun to appear in various fields. In 2017, the term 'Pet-tube' first appeared in the newspapers, referring to the YouTube channels that present animals. There are more than 500 South Korean animal channels on YouTube, of which 113 have more than 10,000 subscribers (Vling, 2021). More than 100 channels introduce unusual animals, but most are animal channels centred on companion animals, mainly dogs and cats. Since the informants were all watching videos of other people's dogs and cats, I limited my participatory observation to channels featuring them. The videos uploaded on the channel are short videos of about 5-20 minutes, sometimes showing the daily lives of companion animals or unusual reactions, and users sometimes post information about living with animals. Channels that are the main fields of this study can be found in Table 1. I thoroughly analysed the comments on the videos. Although the proportion of live broadcasts was low, I participated in a live broadcast that was held as it was a special occasion to examine the viewers' responses.

Table 1. **Information about animal channels***

No	Title of the channel	Subscriber number	Avg views per video	Avg likes	Platform
1	Country Cats	1,100,000	440,448	22,413 likes	YouTube, Instagram
2	MewMew	1,180,000	588,618	23,691 likes	YouTube, Instagram
3	One Woof, One Meow	1,280,000	33,657	1,554 likes	YouTube, Instagram, Twitter
4	Shibas	7,230,000	346,481	5,195 likes	YouTube, Instagram, Facebook
5	House of Stray Cats	330,000	150,785	8,684 likes	YouTube

*The names of the channels have been changed to protect the animals appearing on them.

Twitter was also used to analyse 'Lan-cable butlers'' conversations, shared affection for certain animals, and responses to videos. For example, the social network application is where animal-related issues are mostly shared and discussed, serving as a public forum for human-animal relations. In fact, according to a study conducted by the Korea Agency of Education, Promotion & Information Service in Food, Agriculture, Forestry & Fisheries (EPIS) last year, the amount of companion animal information has increased by 148% on average over the past three years. Among 3.68 million platform users, 89% of the information was mentioned on Twitter (Choi, 2020). Since most of the informants were using Twitter and mainly communicated with me through it, I used Twitter to observe how they reacted to the following animal accounts and channels. The informants of this study are young South Korean citizens in their 20s and 30s who are 'Lan-cable butlers' of online animals. Aside from being 'Lan-cable butlers', these young people share the same idea that their offline reality in South Korea is difficult to survive. The socio-structural reality in South Korea means that neo-liberal young people are excluded from entering the labour market and social security system; thus, young people call South Korea 'Hell-Chosun,' from which they should escape (Park, 2013, cited Lee 2017: 29). 'Hell-Chosun' is a word that compares current South Korean society to pre-modern hierarchical South Korean society, which contains self-contempt and ridicule but is imbued with an acute criticism of inequality and class disparity that is rapidly deepening in South Korean society (Lee, 2018: 33). Living in this 'Hell-Chosun,' 'Lan-cable butlers' explained why they first watched animal channels to find healing by watching cute animal videos in their difficult lives. Originally, they watched a variety of animal channels. However, as they started

to concentrate on specific channels depending on their preferences, their affection for certain animals grew. The amount of time and participation spent watching these animal channels was different for each informant. However, all of them followed specific channels and watched them for at least two hours a day. In addition to regularly watching videos, leaving comments, and downloading photos, they purchase official merchandise, donate during live streams, and actively share their opinions about the channels with each other.

Most of the informants live in a metropolitan area, living with their families in apartments or multi-family houses, with only three informants living alone. Most informants have had experience living with companion animals when they were children. Based on the information obtained from my preliminary survey, I selected 13 key informants, and constantly examined their social media accounts. In this article, I present eight informants, and their details can be found in Table 2 below. I conducted the interviews with the consent of the informants. I translated all the interviews cited in this paper from Korean to English.

Table 2. **Information about informants***

No	Name	Gender	Age	Platforms	Animal channels they mainly watch
1	Claire	F	26	YouTube, Twitter, Instagram	Country Cats, One Woof, One Meow
2	Eunah	F	27	YouTube, Instagram	Croffle
3	Hodu	F	33	YouTube, Twitter, Instagram	Country Cats, One Woof, One Meow
4	Hajin	F	26	YouTube, Twitter, Instagram	Country Cats, MewMew
5	Minji	F	28	YouTube, Twitter, Instagram	One Woof, One Meow
6	Nunu	F	27	YouTube, Twitter, Instagram	Smile D og
7	Yuna	F	26	YouTube, Instagram	Country Cats
8	Heewon	F	26	YouTube, Twitter, Instagram	Country Cats, House of Stray Cats

*The names of the informants have been changed

In the first section, I examine, how ‘Lan-cable butlers’ use terms of address when referring to themselves and their relationships with the animals. Using kinship terms, they try to show how close they feel to these animals, although they have never met these animals offline. In the second section, I deal with the ‘Lan-cable butlers’’ efforts to emphasise that

watching animal videos is not just for their satisfaction. Although informants replied that they are coping with their tough daily lives in neo-liberal South Korea by watching animal videos, they have a strict ethical standard when choosing the channels they watch. In the third section, I deal with the 'Lan-cable butlers'' efforts to interpret the animals' behaviour so that they can confirm whether or not the animals are being abused. Their practices to protect the animals they love also lead to the formation of affective networks and the proliferation of animal ethics both online and offline.

Results and discussion

The use of kinship terms

In South Korean society, various terms of address play an essential role in the communication environment. They include the social relationship between the listeners and speakers and the psychological state in the communication situation (Seo et al., 2019: 475). Also, it is natural to call yourself a third party and refer to oneself using a specific title to express the relationship one is having with the other. Analysing how 'Lan-cable butlers' refer to themselves in relation to animals is an essential indicator of how close they feel to animals.

The leading practices of 'Lan-cable butlers' are similar to the practices of K-pop fans. Hodu's favourite channel, 'One Woof, One Meow,' is an animal account that started on Twitter in 2014 and expanded its realm to YouTube. Although the channel now has over one million subscribers, Hodu followed the Twitter account before the creation of the YouTube channel and supported it by purchasing official merchandise (Figure 1). There is absolutely no way to use Mung's fur, but Hodu described it as 'precious,' showing how well-grown Mung is. Hodu's 'precious fur' (Figure 2) reminds me of the recent trend of K-pop to make and sell pieces of stage costumes worn by singers into keyrings. Part of Hodu's practice is indeed derived from the fandom culture in Korea, such as following their social media accounts, watching live streaming, and purchasing official merchandise.

Figure 1. Official merchandise Hodu purchased from the channel 'One Woof, One Meow'. Photo and permission to publish provided by the informant

Figure 2. Dog hair sent by the YouTuber of the channel 'One Woof, One Meow' as a gift. Photo and permission to publish provided by the informant

However, Claire, who is a 'Lan-cable butler' and has many 'Lan-cable butlers' around her, said that although the practices might be similar, it is still awkward to call someone a fan of an animal. In fact, few online butlers called themselves fans of an animal although the practices are similar, because the animal is still someone's companion, and there is a social awkwardness in identifying humans as a 'fan' of animals.

In this situation, compared to 'fan', 'Lan-cable butler' is a more appropriate term to explain to a third party that they are not just regular viewers but people who have affection for animals on specific channels. Although they are not physically interacting with these animals as guardians do, it is hard to find another term suitable for emphasising that the animals are unique to them. However, when 'Lan-cable butlers' write comments under the videos as if they are talking directly to an animal, and when they want to emphasise that they

are genuinely concerned about the safety and wellbeing of these animals, they use kinship terms to refer to themselves.

'Country Cats', an animal channel with more than one million subscribers, is watched by many informants (Table 2). Cats appearing on the channel are street cats, and the YouTuber has been taking care of them for years as cats gathered one by one at his fish farm. The average length of each video is one to eight minutes, and they show cats running around the countryside or the YouTuber making furniture for the cats. However, he never shows his face or speaks in the video and solely focuses on the cats. Viewers of the channel add 'Beoji' at the end of the YouTuber's nickname. 'Beoji' is the abbreviation of '아버지' (father) and by adding it to the end of the nickname, it emphasises that the YouTuber is the father of the cats in the video. Then who are the 'Lan-cable butlers'? Although they do not directly interact with animals or YouTubers, they use various kinship terms to describe themselves.

The terms that viewers use on the channel 'Country Cats' depend on how similar their age is to the YouTuber's estimated age and what their age groups are. If they are younger than a YouTuber and not older in the social age, they use 'Oppa/Hyeong' or 'Eonni/Nuna', which are the terms for brother and sister. If their ages are similar or higher than a YouTuber, or if it is awkward to be called 'Oppa/Hyeong' or 'Eonni/Nuna', they use 'Imo' or 'Samchon', which refer to one's parent's siblings. The important thing is that in both cases, they attach 'Lan-cable' in front of those titles, or it is naturally implied. In the comments of the channel 'Country Cats', 'Lan-cable butlers' regularly leave comments in the form of letters, and by using kinship terms, they emphasise their affection and closeness to the cats. Extract 1 is a comment left by a 'Lan-cable butler' for his favourite cat because he is about to join the military.

Extract 1. Comment on the video of the channel 'Country Cats' (Country Cats, 2021)

Kim: Samsaek. Oppa is joining the military tomorrow. What should I do when I miss you, Yahong, and Koo in the military. Be well, and I will come to see you again after I am assigned to the unit.

*Samsaek, Yahong, Koo are all cat names

*Translated from Korean to English by the author

The use of kinship terms by 'Lan-cable butlers' is an extension of the way guardians call their companion animals by using kinship terms. Companion animals in South Korea are legally considered as property, but 'they are nonetheless regarded as living creatures with certain rights in the family' (Shir-Vertesh, 2012: 422). Lee named companion animals living in South Korean households as '늦둥이 막내' (a child who was born late into the family) because 'regardless of their age and size, companion animals are considered as sons/daughters/youngest brothers or sisters of the person raising them, and because they are "being protected and cared for by human beings"' (2017: 395). Since 'Lan-cable butlers' are not the animal's real guardians, they cannot refer to themselves by using titles of the immediate family. Instead, they use the titles of collateral relatives such as aunt/uncle/brother/sister to show how much they care about animals online. By conducting research on Israeli families who are living with companion animals, Shir-Vertesh suggested that 'animals can be included in families as "flexible persons", but their nonhumanness sanctions the possibility of exclusion at any juncture' (2012: 428). However, in the case of 'Lan-cable butlers', because they are not physically living with these animals, the position of animals as collateral relatives does not change within their lives. These animals are not their children or '늦둥이 막내', but they are individual beings (relatives) who 'Lan-cable butlers' feel they are deeply connected with. Although there are always limitations because they are not the animal's guardians, 'Lan-cable butlers' justify that they can exert influence on the lives of these animal channels to some extent because they are sponsoring channels, increasing the view counts, and are constantly showing interest in animals as extended relatives.

These usages of kinship nomenclature brought about a change in terms used online as well. While watching the live streaming of animal channels, I discovered that the word 'Lan-cable butlers' used when they donated money to the channel was '용돈' (pocket money), which refers to money given between relatives. In South Korean society, pocket money is given to a young relative by older relatives. Although the viewers know that the money they donate cannot be directly used by the animals and instead goes to the YouTuber, they still say that they are giving pocket money to the animal. Also, when donating money, online butlers do not and cannot ask animals to react directly. Instead, the donors clearly expressed that they wanted their money to be used 'directly' for animals, such as buying animal foods.

Moreover, instead of expecting the guardian to make the animal behave in certain ways, they only request that the animal be given snacks or that the camera's location be changed so that animals could respond naturally. This is because there is a shared affect that expecting a direct response from animals is not an action that a proper 'Lan-cable butler' would do. Even though requesting guardians to make their companion animals behave in certain ways on the channel is not prohibited, the sense that it should be avoided and the displeasure of someone breaking an unstated rule is a shared affect of 'Lan-cable butlers'.

The use of kinship terms to refer to oneself in a relationship with certain animals clearly shows the effort to emphasise a close relationship with animals online. Even if donations are made under the term 'pocket money', 'Lan-cable butlers' have shared the affect that they should not require the animals to react. Beyond terminology, 'Lan-cable butlers' also started to apply ethical standards when selecting animal channels and to actively police these channels, denying the fact that they exploit animals for their own satisfaction by watching animal channels.

'I'm not using the animal for my own pleasure': 'Lan-cable butlers' active policing on animal channels

By using kinship terms to prove their close relationships with the animals on the channels, 'Lan-cable butlers' try to emphasise that they are not watching the animal channels for their satisfaction, even though many of them answered that one of the main reasons they watch animal videos is to overcome their complex lives. 'Lan-cable butlers' also have to deal with the potential for animal abuse because animal channels lead to profits. As this threat became real due to particular affective incidents, 'Lan-cable butlers' realised the problem of watching animal abusing channels and became cautious in choosing channels and accounts to follow. They choose channels that donate their profits back to society and do not feature purebred animals.

Before explaining their favourite animal channels in earnest, informants chose 'cuteness' as a prime reason for watching animal videos. Specifically, they explained that watching cute animal videos gives them the strength to keep up with their mundane reality and helps them to calm their nerves. This is in line with Page (2017: 76), who situates the rise

of cute animal videos within late-capitalist affective circuits, focusing specifically on shifts in labour and the workplace. Based on Berlant's (2011) book *Cruel Optimism*, which describes the phenomenon of being attached to something despite it being harmful to oneself, Page proposes the concept of 'Cruel Relief' (2017: 76). According to her, 'cute animal videos help us to exist by providing a short form of connection, a tug, a charge, a moment of respite' (2017: 80). However, the relief is cruel because 'it is so fleeting and normalizes neo-liberal capital and work, thus intensifying the subjection of the relieved subject' (2017: 80). Nunu explained to me that in this neo-liberal Korea, 'Hell-Chosun,' it is natural for people to watch animal channels to overcome a hard life:

> Recently I saw lots of people using a phrase "I want cats to rule the world" in social media. I agree with that. The reality is so harsh, and I can only get comfort from cats and dogs. I wish they could rule the world.

Minji also explains that she tends to solve the hardships of everyday life by watching animal videos: 'I started watching animal videos often when I got angry at work, especially when I had to calm down. I figured out that when I see cute videos, I feel much better'. Hajin, Yuna, and other 'Lan-cable butlers' also agreed with these statements.

However, all the informants vehemently denied that they are watching animal channels just for their satisfaction. Although animal videos indeed act as 'Cruel Relief' for the informants, things get complicated as they begin to have a greater affection for specific animal channels and animals. For example, after an affective incident, their critical attitudes toward watching animal videos for human pleasure become more robust. The 'PyeongHwauri' incident, for example, was an affective event that became a threat and alerted 'Lan-cable butlers' of the dangers of animal abuse that may occur in the unknown future. 'PyeongHwauri' was a famous YouTube channel for adopting abandoned cats and temporarily protecting them. The channel was created by a veterinary student and had more than 500,000 subscribers. However, in May 2020, an acquaintance of the YouTuber posted a video revealing what the YouTuber had really done, starving and abusing his cats so that they would come up to him and act cute; and the animals he temporarily protected were not

rescued but purchased from a pet shop. This turned popularity into anger. Not only did the YouTuber's lack of morality provoke this incident, but the resulting trauma reminded 'Lan-cable butlers' that the daily lives of watching animal videos were always in the 'crisis of ordinariness' as Page (2017) suggested.

According to Berlant (2011) and Cvetkovich (2003), trauma is not an exceptional event in daily life, but it 'saturates' everyday lives and events of the present (Kim, 2014: 51-2). 'Lan-cable butlers' who enjoyed watching cute animals were shocked to realise that their pleasure from watching the videos may have stemmed from animal abuse and exploitation. The ever-present possibility of hidden animal abuse in the channels they watch became a threat. Masumi expresses that the 'PyeongHwauri' incident is 'left carrying an affective dusting' (2010: 58) of animal abuse within 'Lan-cable butlers'' everyday lives. Extract 2 below shows that the 'PyeongHwauri' incident is a vivid threat to 'Lan-cable butlers'. They are trying to avoid animal channels that might have the potential for animal abuse.

Extract 2. Comments on the 'PyeongHwauri' incident case lawyer's video (Lawyers, 2020)

No	Comment
1	A: I have been reluctant to watch YouTube presenting kittens after this incident happened. I think it affected me a lot. Sadly, in a negative way.
1-2	B: That is true. Many YouTubers only adopt young dogs or cats, so I only watch YouTubers who have been living with an adult cat for at least a few years.
1-3	C: Especially when a YouTuber says they rescued a stray cat, I feel suspicious from the start—what a shame.
1-4	D: Indeed, it is not good to show kittens on YouTube. It is better not to expose kittens or puppies since some cases in which people bring them when they are cute and throw them away when they grow up.
1-5	E: Rather than not watching the cat rescuing videos, you must not watch the videos that state the cats' breeds in the title.

*Translated from Korean to English by the author

Informants who previously watched channels featuring pedigree cats also explained that their preferred channels have changed due to growing distrust of channels presenting purebred cats. Heewon, Hodu, and Yuna had negative opinions about 'MewMew', which uploads videos depicting life with several pedigree cats. Heewon stated that showing breeds on YouTube led to certain breeds' popularity, creating a vicious cycle of buying animals and abandoning them. Hodu and Yuna explained that they could not be convinced that the

channel does not exploit animals because it feels artificial to have various purebred cats in one space. In the case of Eunah, she showed a list of Instagram animal accounts and emphasised that she follows the accounts of those who live with mixed-breed animals, although she likes retrievers: ‘Once they become famous in the media, people sell the same species a lot, and when they become less popular, they come out as abandoned dogs. I think that is why I like hybrids’. Therefore, the channels ‘Country Cats’ and ‘House of Stray Cats’ are famous among informants. Since these channels show the coexistence of street cats and humans, informants expect the channel to have no possibility of animal abuse and exploitation.

Also, ‘Lan-cable butlers’ who participated in this study have chosen to watch animal channels that donate their profit to animal shelters or other animals in need. Hodu's favourite channel, ‘One Woof, One Meow’, also features purebred dogs. However, because the YouTuber, who is the dogs’ guardian, frequently donates profits to animal shelters, Hodu says she does not feel guilty about watching the channel's videos: ‘The YouTuber keeps donating the profit. She can fill her self-interest with the profits of the merchandise, but she does not do that. I think that is one of the reasons why I love this channel’. Yuna was critical of channels that only sell merchandise at high prices without donating when all the profit is from the animal's popularity:

> I think selling official merchandise of their companion animals is okay as long as they donate. I once watched a channel that sold the merchandise too expensive. What was worse, the YouTuber does not even donate. I feel like the channel is just for profits.

In this challenging neo-liberal South Korean society, animal channels give ‘Lan-cable butlers’ the strength to live their lives. Although animal videos are uploaded on capitalistic platforms, ‘Lan-cable butlers’ do not want their relationships with animals to be capitalistic. However, the anxiety that they may be exploiting animals and their cuteness has changed into a vivid threat due to an affective incident, ‘PyeongHwauri’, which resulted in ‘Lan-cable butlers’ considering ethical conditions when choosing which channels they watch. ‘Lan-cable butlers’ are striving to choose animal channels that are free of animal abuse, and to do so,

they avoid channels that feature purebred animals and choose channels that donate their profits.

Affective network and the efforts to understand animals

Although most of them are probably watching animal videos alone in a physical environment, ‘Lan-cable butlers’ are not alone online. Most of the informants of this study communicate with other ‘Lan-cable butlers’ through Twitter comments directly and indirectly. This communication forms an affective network that affects the ‘Lan-cable butler's’ way of watching the animal channels.

While I was interviewing Hajin, she recalled the ‘PyeongHwauri’ incident:

> While I was watching the video, I felt like something was wrong. I do not know how to explain, but I felt that the YouTuber was using the cats as content. So, I checked the comments, and some other viewers felt the same way as I did. That is when I unsubscribed from the channel.

Informants frequently read comments when watching videos of their favourite animals. For Nunu, it is essential to check the comments of each video to feel empathy, ‘I read a lot of comments because I like them. But sometimes I just don't read the comments if they are not in Korean’. As Dean suggested:

> blogs, social networks, Twitter, and YouTube produce and circulate affect as a binding technique. Although affective attachments to media are not in themselves sufficient to produce actual communities, they enable mediated relationships that take a variety of changing, uncertain, and interconnected forms (2010: 21).

Checking the opinions of other ‘Lan-cable butlers’ who are watching videos is an important activity for the informants, including Nunu. In particular, as doubts about the ethics of a

channel begin to grow, ‘Lan-cable butlers’ analyse whether the connection between animals and guardians is real or not by leaving comments.

Informants believe that by checking the way guardians and their companion animals communicate, the way animals react, and the guardian's voice, they can feel whether the guardian is using the animal or not. Although they have not had companion animals for a long time, informants create their standards for the ethical relationship between companion animals and guardians by watching animal videos and animal discourses every day. Although animals cannot speak, it is vital for these ‘Lan-cable butlers’ that they must also feel the ‘belief’ and ‘sincerity’ of the guardians and companion animals. Minji said:

> There's a difference between a person who just exhibits their companion animal and who shows a lot of affection towards them. I think I can know it by looking at the eye of the companion animal when they see their human guardian. Also, you can hear the voice of the guardian when they call their companion animals.

Yuna, who lives alone but has a companion cat in her family's home, also felt the same way, ‘When the cats answer to the guardian by blinking, and when the cat stays still even if the guardian touches his belly, I can feel the connection between them’.

Some ‘Lan-cable butlers’ share their interpretations about the behaviour of the animals in comments to check whether other viewers think the same way. By analysing the comments, we can see that the way ‘Lan-cable butlers’ understand the behaviour of animals also changes over time. Extract 3 shows that the ‘Lan-cable butlers’ are trying to find out how the animals and human companions interact with each other by using personification and offering possible explanations about the animal's reaction.

Extract 3. Comment on the video of the channel 'Country Cats' (Country Cats, 2020).

No.	Comment
1	A: 00:22 I think she is looking up because she knows the YouTuber will pat her head if she meows. Samek is the king of cuteness.
1-2	C: I think she found out the YouTuber's hand.
1-3	D: I think the cat answered 'yes' because the YouTuber called her at the muted part.

*Translated from Korean to English by the author

In Extract 3 above, 'Lan-cable butlers' are not only acting as distant or neutral observers of the animal's behaviour (Servais, 2018: 2). They are trying to interpret the behaviours of animals in anthropomorphic ways and understand them. With time, to find genuine interaction between humans and animals in the video, 'Lan-cable butlers' increasingly use animal behavioural knowledge beyond their own humanised perspective, which can be viewed in the comments written on the same channel after a year (Extract 4).

Extract 4. Comment on the video of the channel 'Country Cats' (Country Cats, 2021).

No	Comment
1	A: He must have been surprised when someone came in at first. Nevertheless, when he knew that it was the YouTuber, he was relieved and stretched. Why is that so lovely. He must have missed you so much.
1-2	B: I heard cats stretch when they are happy to see someone.
2	C: I think I have heard somewhere that meow without a sound means full of love. They say that cats do that to the actual mom-like human.
2-1	D: Yes, that is the sound of a grown cat's voice when it made the voice of themselves when they were kittens. Just like people make lisping sounds to babies. Cats sometimes make short sounds or just open their mouth without sound. I think the cat thinks the YouTuber is his dad.

*Translated from Korean to English by the author

'Lan-cable butlers' go to these efforts as they try to find evidence that the guardian and the animals are genuinely connected. When they think that sincere interaction is not taking place and that the YouTuber is forcing certain behaviours on animals, 'Lan-cable butlers' begin to raise suspicions. In the case of the 'PyeongHwauri' incident, the ardent viewers raised suspicion when they felt something was not right with the cat's behaviour. 'Lan-cable butlers' not only communicated through comments but also took their suspicions to other social media platforms and shared their thoughts online. This led to the filing of

national petitions to the Blue House Website. Cheong Wa Dae, or Blue House, is the official residence of the President of the Republic of Korea. Both terms were used to refer to a state agency or to the President's Office in May 2020.

While active forms of collective action such as petitions sometimes appear, some phenomena share an affective atmosphere and implicit agreement. Uploading the news that one purchased a purebred animal from a pet shop on Twitter could lead to anonymous attacks or loss of followers. Although the popularity of purebred animals continues in South Korean society, the atmosphere of criticising those who sympathise with this social trend is implicitly shared among 'Lan-cable butlers'. The environment in which companion animals are living is also the subject of policing.

This tendency has a particularly significant impact on 'Lan-cable butlers' who are not living with companion animals by stressing that several conditions and efforts are needed to live with them. The ethical consciousness fostered through this online collective atmosphere made informants feel like they were 'unqualified' to live with companion animals. Eunah had a bitter memory that she could not give her dog as many amenities as YouTubers do on the channels, 'I couldn't buy expensive snacks for him. I was so sorry that I couldn't give him life just like the other dogs on YouTube'. Because she has seen the process of her Twitter friend living with a companion cat, Minji had many thoughts about having companion animals, 'My Twitter friends have a lot of cats, and one cat was very sick. My friend had a hard time, and she spent a lot of money and effort on chemotherapy, and now the cat is gone…'. Minji had a negative opinion about people mindlessly having companion animals and explained that she would not quickly adopt animals.

Furthermore, the affective network between 'Lan-cable butlers' and the virtual relationship online expands the horizon to offline relationships. 'Lan-cable butlers' who subscribe to street cat channels were learning how to treat animals through comments and Tweets as well as video clips. Many informants were personally trying to create meaningful relationships with actual animals they encountered outside by giving names to street cats, feeding them, and taking pictures.

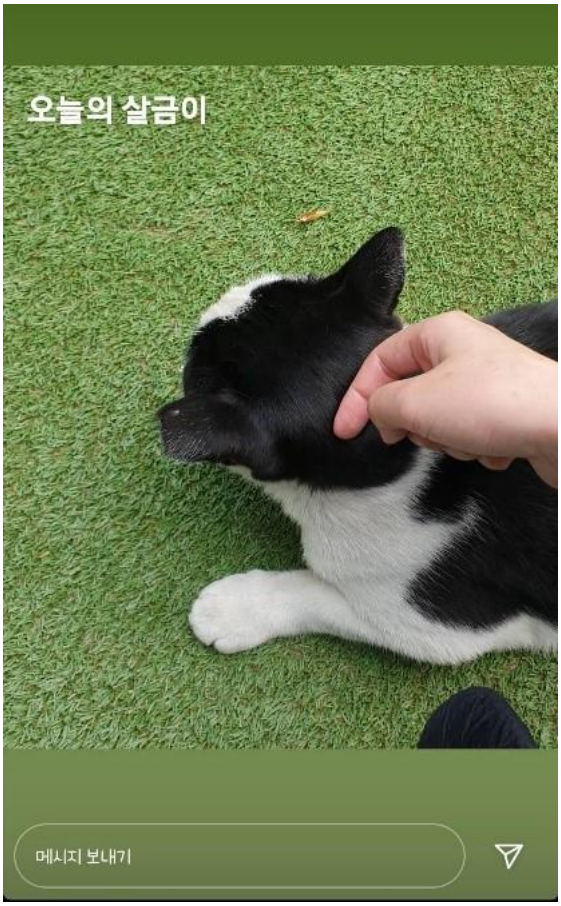

Figure 3. Salgeumi, Yuna's street companion cat. Photo and permission to publish provided by the informant

Yuna is a long-time viewer and 'Lan-cable butler' of the YouTube channel 'Country Cats' and takes care of a street cat named Salgeumi. She is taking care of street cats living near where she works. Because she cannot put all her time into taking care of these cats, she regularly purchases cat food, which she gives to a 'cat mom' in the district. 'Cat moms' are the people who take care of street cats living in their neighbourhoods. As you can see in Figure 3, the cat mom shows her affection for Salgeumi by posting pictures of their daily meetings on Instagram (except for weekends). Although Salgeumi is not Yuna's cat, she is like a street companion cat and sister who motivates Yuna to work. Hodu also explained that since she and her mother became 'Lan-cable butlers', their attitudes toward street cats have changed completely, 'My mom used to stomp around when she saw a street cat, but now when she meets the street cats, she asks, "Did you eat anything?" and when the cat answers, she is really thrilled about it'. Hodu's mother realised that street cats are not a threat to her and that there is a way she can interact with them after watching the animal channel.

While the online environment is not a place for physical contact, ‘Lan-cable butlers'’ constant affection and interest in certain animals extends to other nonhuman animals. Through this, ‘Lan-cable butlers’ go beyond their initially limited experiences by learning how to be concerned about an animal they have never met and cultivate their own ethical standards. In *When Species Meet*, Haraway (2019) asks why she pays attention to human-animal relationships when there are so many difficulties in the world. According to her, doing dog agility with a companion dog makes one ‘become more sensitive to the demands of precious otherness of all sizes’ (2019: 191). Of course, the relationship that informants have with animals online is bound to be different from the deep relationship that may be formed between a human and an animal during dog agility competition or training. However, in order to maintain the meaningful relationships they are having online, the informants seek ethical ways to become sensitive to the requirements of others. They try to interpret the animals' behaviour and examine whether they have a real connection with their guardians. These practices are initiated by individuals and create an affective network, which leads to thoughts about animal ethics and changes in their offline human-animal relationships.

Conclusion

During my fieldwork, I watched all the ‘Country Cat’ animal channel videos since it was a favourite channel of most of my informants. While watching the videos, I encountered a heart-breaking thread of comments. The mother cat, who appeared on the channel from its inception, crossed the rainbow bridge three years ago. Every year, ‘Lan-cable butlers’ visited the video that announced her death and left comments to show their respect. In Korea, it is a tradition to hold memorial services for ancestors on certain holidays each year, and people performed this ceremony for the cat through their comments. This shows that the relationships between ‘Lan-cable butlers’ and animals are tightly intertwined.

Advances in technology have allowed human-animal relationships to be virtual as well as physical encounters. ‘Lan-cable butlers’ gain the strength to cope with life in neo-liberal South Korea, often referred to as ‘Hell-Chosun,’ by watching the videos of other people's companion animals. However, ‘Lan-cable butlers’ do not simply gain personal satisfaction by watching these videos. As their viewing time becomes longer, they start to pay attention to individual animals and the human-animal ethics of the channels. By using kinship terms, ‘Lan-

cable butlers' show their affection towards the animals and emphasise that their relationships with the animals are meaningful for them. Also, the 'Lan-cable butlers' presented in this study avoid watching animal channels exhibiting purebred animals and select channels that donate profits since they have anxieties about the possibility that guardians may be exploiting their animals.

Meanwhile, the 'PyeongHwauri' YouTuber's animal abuse incident continued to have a traumatic affect, making 'Lan-cable butlers' focus more on each animal's behaviour to examine whether they are free from abuse. These active practices also form an affective network and show the possibility of collective movements. Also, instead of being confined to affective networks between 'Lan-cable butlers', these activities result in relationships with animals offline, which is possible because of online relationships. These relationships with other species, which are being created online, have a massive impact on the overall human-animal relationships in Korean Society.

There are several anthropological studies on human-animal relationships, but most of them focus on the relationships formed through physical contact and interactions. This study may be the first, amid research on human-animal relationships online, to focus on the new subject of 'Lan-cable butlers' in South Korean society. By watching animal videos and taking care of these animals' wellbeing, 'Lan-cable butlers' set distinctive standards on animal ethics. Online encounters with animals also affect their offline life. With more and more relationships being created online, this study provides a novel foundation for understanding human-animal relations in South Korean society.

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Observing humans in a zoo: How does zoo-affiliation relate to recognition of animal subjectivity?

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Through an autoethnographic lens, this study uses observations of humans in a zoo, including the author's own thoughts and behaviour, to investigate the differences between zoo guests and employees in their likelihood to recognise animal subjectivity. Recognition of subjectivity leads to moral implications about the treatment and use of animals. An autoethnography over two years interning at an AZA-accredited USA zoo suggests zoo employees display the highest levels of recognising animal subjectivity compared to guests, but that both are likely to recognise animal subjectivity to some degree. Zoo guests and employees may more easily reconcile animal subjectivity with captivity if they can maintain a perspective of human exceptionalism separate from subjectivity or subscribe to a more lenient philosophy than animal rights.

Keywords: animal subjectivity, captive wildlife, zoo, keeper, posthumanism

Introduction

While otherthanhuman animals (henceforth referred to here as 'animals') have historically served as objects of research, consideration of animals as subjects in academia is fairly new, arising with the turn towards posthumanism and critical reflection on the human/nature divide. As French philosopher Jacques Derrida explains it, humanist thought, full of human exceptionalism where humans stand alone, rational, and superior, can only be conceptualised with the idea of an 'irrational, lower and driven by instinct' animal alongside it (Derrida, 2002; Fudge, 2008: 6). Recognising animal subjectivity threatens the superior status of humans that the human-animal dichotomy naturalises, raising moral implications for the use and treatment of animals in spaces like zoos. A noteworthy turning point in academic consideration of the animal other was Peter Singer's (1987) *Animal Liberation*. Utilitarian philosophers like Singer assert the interests of animal subjects should be weighed equally to

human interests, but utilitarianism allows for harm to some individuals (human and nonhuman) to maximise aggregate benefit (Singer, 1987). If zoos cause more benefit to more individuals through physical and psychological benefits to the humans involved, funding and supporting rescue, rehabilitation, and conservation efforts, and inspiring and educating guests' conservation actions with far-reaching implications, while also minimising the harm to captive wildlife through high welfare standards, the utilitarian equation might balance out in favour of zoos. It is noteworthy that when asked about the topic, Singer confirmed the potential for zoos to be ethical but stated he does not personally believe many zoos hit this mark (Keaulartz, 2015). Animal rights activists followed the animal liberation movement with arguments that animal liberation based on utilitarianism does not go far enough, stating all individual animals have certain inalienable rights as humans do (Regan, 1997). For animal rights activists, recognition of animal subjectivity calls for the eradication of zoos, among other human uses of animals, with no exceptions (Regan, 1997). Philosopher Martha Nussbaum's (2006) capabilities approach suggests animals (including humans) should have the opportunity to express functions they are innately capable of, allowed to flourish in their own way, and live a life of dignity. Nussbaum (2006) recommends evaluating each animal's innate powers to determine which are required for a life of dignity, allowing room for the different needs and capabilities of each animal. The capabilities approach may be congruous with the existence of zoos when high welfare standards are maintained that allow animals the opportunity to express their natural behaviours, such as freedom to move, enjoy air, exercise their bodies and minds, and form conspecific bonds (Nussbaum, 2006).

Because recognition of animal subjectivity may lead to adopting philosophies that oppose the existence of zoos, this study investigates if zoo guests and employees, groups that affiliate themselves with zoos, are likely to recognise animal subjectivity. Zoo guests and employees benefit from the existence of zoos. In addition to being gainfully employed (although for notably low wages and little career growth opportunities), research suggests many zookeepers consider their role a 'calling' (Bunderson and Thompson, 2009: 36). Keepers report experiencing rewarding bonds with animals that lead to greater job satisfaction and personal psychological wellbeing (Hosey and Melfi, 2012; Riggio et al., 2020; Szokalsi et al., 2012). Research into the effects of visiting zoos suggests zoo guests can enjoy improved physical and psychological health from a visit to the zoo (Akiyama et al., 2021; Sakagami and

Ohta, 2010). The primary reason for visiting a zoo appears to remain recreation and fun, with additional reported experiences of tranquillity, reflection, and connection with animals (Clayton et al., 2008; Howell et al., 2019; Luebke and Matiasek, 2013). Because guests and employees benefit from the existence of zoos, members of these groups may choose to ignore or reject animal subjectivity to abate cognitive dissonance. Alternatively, they may subscribe to different schools of thought (utilitarianism or the capabilities approach, rather than animal rights) that allow them to justify animal captivity while recognising animal subjectivity.

Much of the material investigating opinions on animal subjectivity appears centred mostly on farmed animals, with less focus on zoos. 'The Becomings of Subjectivity', an investigation by Despret, explored perspectives of cow breeders and found 'breeders adopt perspectives in which they authorise their animals to think and judge their intentions and to respond with their own intentions' (2008: 153). Breeders reported believing their animals could understand their own human perspective better than the breeders could understand their animals, showing a recognition of the private mind and emotions of animals beyond human access (Despret, 2008). Despret found implicit suggestion from breeders that the cows 'collaborated in the breeders work' (2008: 132), a sure sign of intersubjectivity and in line with Coulter's (2016) observations of farmers placing animals on a commodity-companion continuum in multispecies care work. Interestingly, when Despret and her co-interviewers tried to ask breeders more directly about multispecies collaboration, they were met with 'resistance or incomprehension' (2008: 132). This is possibly because of moral implications in viewing animals as subjects and active agents that would make breeders' jobs psychologically more difficult to perform. It follows that if breeders caring for their animals would experience this intersubjectivity in their work, keepers caring for zoo animals might as well. Likewise, keepers may struggle with the explicit idea of multispecies collaboration.

Investigations into keeper-animal relationships have explored the impact of the relationship on animal welfare (Cole and Fraser, 2018). Cole and Fraser (2018: 50) identify 'treating animals as individuals' as a key component of the human dimension of animal welfare. The researchers cite a survey involving dairy cows in which cows called by name produce higher milk yields (Bertenshaw and Rowlinson, 2009). Cole and Fraser (2018) suggest these resulting milk yields may signal the impact of more positive human-animal relationships on lessening the stress of human contact and husbandry. They also point out that 'recognising

and treating animals as individuals', in other words recognising their subject-status, allows keepers to identify their unique personalities and make medical or management decisions accordingly (Cole and Fraser, 2018: 53). Additional studies support that stronger keeper-animal relationships and bonds facilitate improved husbandry and management, the earlier recognition of medical needs, less stressful procedures, and improved overall welfare (Hosey and Melfi, 2012; Riggio et al., 2020; Szokalsi et al., 2012). These investigations explain the benefits of keepers recognising animal subjectivity but did not explore if keepers are likely to recognise the subjectivity of their charges.

Keeper recognition of animal subjectivity may be implied through the connection, bonds, and relationships self-reported by keepers. A relationship requires all parties to be active agents, each perceiving and relating with the other. Birke et al.'s (2019) investigation, 'You can't really hug a tiger', supports that keepers do indeed recognise the subjectivity of animals. The researchers interviewed 11 keepers to understand if keepers bond and create attachments with the animals they care for. This investigation was brimming with signs of recognising animal subjectivity. 'The word "work" was most commonly used to speak about "working with" animals in the personal sense' (Birke et al., 2019: 600) suggesting a recognition of the collaborative other (the animal) as an active agent. Keepers also often identify specific individuals with whom they share close emotional relationships (Birke et al., 2019; Riggio et al., 2020), suggesting recognition of those individuals as unique and separate from others in their species. Although some keepers identified closer, familial relationships with companion animals at home, other keepers called the zoo animals 'family' and the researchers considered that the close human-animal communication described by keepers may cross into intersubjectivity (Birke et al., 2019).

Finally, several researchers have explored zoo visitor connection with animals (Clayton et al., 2008; Howell et al., 2019). Researchers identified themes in visitors' descriptions of connection, including the attribution of mental states, inspired emotions in the visitor, making comparisons between the animals and humans, and interaction with the animal (Clayton et al., 2008; Howell et al., 2019). Attribution of mental states and inspiring emotions are themes associated with empathy, which presupposes the ability to relate to another and understand their feelings. The desire to have a meaningful interaction with animals suggests visitors recognise the animals as active agents. In Howell et al.'s (2019: 6) investigation, one

respondent proposes the animals ‘sense you and your feelings’ while others did not understand the question regarding connection or report feeling one, showcasing the breadth of perspectives among zoo visitors.

Methods

An ethnography and autoethnography occurred over my two years working in a large, popular zoo situated in a U.S. city, working in both the Animal Welfare and Record Keeping departments. The zoo, which will remain unaimed for the sake of anonymity, is accredited by the Association of Zoos and Aquariums (AZA), meeting established standards in operations, management, animal welfare, husbandry, and veterinary medicine. Therefore, it is through the lens of these AZA standards that this ethnography is positioned and observations from a roadside zoo or other captive wildlife facility may not be comparable. I take on a participant as observer role, as I have observed and participated in discussions about — and at times with — animals, with zoo employees and guests. The observations discussed include a three-month period of considered notetaking with this research topic in mind, as well as drawing on remembered experiences over the past two years prior to developing this research question.

Over the past two years, I have fully immersed myself in zoo culture, observing and speaking with zoo employees, guests, and animals. I was a regular zoo guest for years before transitioning into the role of intern and eventually Anthrozoology researcher. I am a vegan, in large part due to my beliefs about the ethics surrounding raising and killing nonhuman animals, and I enjoy close bonds with my companion animals. My many identities inform my own perspectives on animal subjectivity, zoo ethics, and my behaviour and relationships in the zoo, and this is the lens through which I conduct and consider this ethnography. As an anthrozoology researcher who carefully considers topics like animal subjectivity, my own perspective on subjectivity may not be representative of zoo employees in general who may not regularly engage in discourse on subjectivity, though who I will argue engage directly with that subjectivity daily, and I consider my past perspectives at the zoo before entering anthrozoology or becoming associated with terms like ‘subjectivity’.

Autoethnography/Ethnography

Working in Animal Welfare, a recognition of animal individuality is forefront in analysing welfare issues and coming up with potential solutions. In addition to consideration of the animal's natural history and what might work for other members of the same species, their personalities, relationships, and personal history are considered as well. There are generally observation periods involved in welfare management. Ideally, the observer would not interact with the animal, since their interaction or relationship may add a confounding variable to the welfare aspects being studied if it causes the animal to behave differently. Without access to cameras, though, observations may take place in person, and if the animal can see the observer, developing a more comfortable relationship doesn't always require much more than consistent time spent observing the other. That is to say, as an observer, I have tried my best to remain objective and impartial, but the animal other who sees me occasionally does not. To me, it seems impossible to perform an animal-facing role such as zookeeping or animal welfare researcher without implicitly recognising animal subjectivity.

At the same time across the zoo in an office and facing a computer, record keeping standards, at least at this particular facility, recently changed to require employees to use quotations around animal names and refer to them predominately by their accession number. While this standard assists in maintaining clear records, from the perspective of the person entering the records (my own perspective), the practice can feel debasing and objectifying, separating the animal further from subject status. Similarly, this facility's institutional note guidelines dictate referring to the animal in the note as 'the cat', 'the rhino', for example. instead of affording them pronouns like 'she', 'he' or 'they'. The given reasoning for these guidelines is to avoid confusing the animals with the keepers. It should be clear that the rhino received a de-wormer and not the rhino-keeper, even if both are referred to at times as 'she', and the guidelines to avoid pronouns for animals further removes the subjectivity that is seemingly obvious in direct interactions. As Hurn (2010: 27) asserted, 'the objectification of non-human animals is representative of the views of human informants.' Though Hurn referred to anthropologists, it's possible this objectifying record keeping practice reflects an objectifying view of the person who instilled the practice or potentially informs the views of the zoo employees who follow the guidelines dutifully. I don't know what mistake might have been made to justify this note standard, if there was one, so the change might be well

founded. Still, I find it striking that employees may have to switch back and forth between objectifying and recognising animal subjects to adhere to the different roles and tasks of their job.

At the zoo, there are signs of recognising animal subjectivity among employees and guests alike, though I have noticed employees are better situated than guests to recognise subjectivity. Employees generally speak directly to animals, use their names, attribute mental states, and talk about personal histories and personalities.

Keepers often speak to and with the animals. Keepers and trainers ask the animals to perform certain behaviours such as shifting into or out of enclosures or holding areas off exhibit for medical procedures. In these instances, the keeper often communicates their desires to the animal in a combination of words, hand signs, body language, and whistles and although they (often) do not expect the animal to respond verbally, the animal will generally show some understanding of the human keeper's desires and mind by complying with the request. This, of course, could be evidence of operant conditioning just as much as subjectivity, though there are other multispecies communications taking place as well. On an intern swap day when I assisted a keeper team with their husbandry procedures, I was sprayed head to toe by a Tapir *(Tapiridae)* marking me. The team laughed about my initiation, relaying that that specific Tapir would spray any keeper who got within spraying distance. The keepers felt sure it was an affiliative behaviour, a playful communication from the Tapir to his caretakers. The spraying may just as well be evidence of operant conditioning if the Tapir finds the reaction of sprayed keepers rewarding, though that itself might point to the Tapir's individual preferences (surprised and wet keepers). It's possible this scenario displays the risk of using animals as mirrors for ourselves, projecting onto them anthropomorphic intentions and inner thoughts where there were none (Mullin, 1999). It's also possible the keepers' relationship with the Tapir, built off daily intersubjective multispecies care work (Coulter, 2016), has informed the keepers' guess at the Tapir's true intentions. Although we may not know the Tapir's intentions, we know the keepers believe the Tapir is interacting with them in a meaningful and communicative way as an active agent, suggesting they recognise his subjectivity.

According to zoo employees, Dolly, a white-cheeked gibbon (*Nomascus leucogenys*), has 'generational trauma'. Her dad bit off one of her fingers when she was young, and she

has since done the same with two prospective mates. Dolly dislikes men: gibbon and human. Her keepers will tell you that she asks for back scratches, the volunteer docent will tell you she's 'crazy', and I myself wonder if she might be queer. That keepers understand Dolly's eye contact mixed with pushing her back up to the barrier as a request for back scratches, without a shared language, is evidence of intersubjectivity. Recognising Dolly's personal history and personality are crucial in making management decisions: should she be housed with a male gibbon? Should she undergo desensitisation training with male keepers? It would seem recognising animal subjectivity is part of the job for at least some zoo employees.

Harry, a white-cheeked gibbon, and ex-mate of Dolly, (who, yes, is missing a finger) loves brunettes and is widely known to have crushes on some of the staff. Suddenly one day, after months of working there, Harry noticed me, and I've never once passed by his exhibit since without him rushing to greet me, hearing his chirping follow me as I walk by, even when I am covered in a face mask, sunglasses, and a hat, or out of uniform and in street clothes. It seems Harry is relating with me, the me who changes outward appearance through clothes, rather than just some signal of a zoo employee via uniform. I wonder if we might recognise each other outside of this facility. His chirps to me, I feel sure, are attempts at communication and though I imagine the conversation to be affiliative, I know his 'crush' might also be disdain – I recognise I do not truly know his internal mind, though I wonder if our shared ancestry lends any credibility to my intuition. Either way, Harry recognises and communicates with me, and although I don't know what he means to say, I see the other who sees me, as Derrida was seen by his cat (Derrida, 2002), and I know of several other employees who also recognise themselves as targets for his supposed-affectionate attention. Attention, seeing and knowing are intersubjective experiences only subjects can provide (Derrida, 2002). Although employees may not consider their relationship with Harry on those terms, they certainly recognise that Harry sees them in a way other gibbons or mere objects do not.

I have a personal relationship with Nala, a Florida panther *(Puma concolor coryi),* that I cultivated over several months of a project monitoring her welfare. At the start of the project, she mostly ignored me, but by the end, I was fortunate enough to be a hide-and-seek partner. Her playful attention delights and validates me in ways similar to a companion animal; I feel chosen and accepted by another who sees me and can actively decide for herself if she finds me worthy of connection. I noticed she seemed to prefer one keeper over the

other and treated the one she preferred to games of hide and seek and lively conversations of chirps and chuffs, while more slowly making a guarded appearance for her other keeper, or not at all, even when he held her dinner. People in relationship may start to predict with some accuracy how the other is likely to behave (Hosey and Melfi, 2012), which is why one keeper would hide behind the door to jump out at Nala at exactly the right time as she would rush the fence and the other keeper would grumble before calling out to her about how unlikely it was that she would listen: Her keepers are in relationship with her. Nala's keepers' predictions of her behaviour and unique relationships with her suggest intersubjectivity.

Guests often lack the knowledge of personal histories, personalities, and names of animals that (some) employees must know as part of their jobs. Some guests refer to animals as 'it', but the majority refer to them as 'him', seeming to impose the male-dominated prejudices of our human society's generic 'he' onto the animals. It appears to me that most guests arriving at the pig *(Sus)* exhibits yell 'Pumba!' as if all pigs are just symbolic representations of the cartoon, English-speaking pig in The Lion King. Some guests do ask employees for the animal's name – but about half of them immediately start yelling the names at the animal, expecting the name alone to transcend any need for personal relationship in calling the animal closer where they can fulfil the human desire for interaction, proximity, and entertainment.

I have overheard and participated in discussions with zoo employees about our self-proclaimed accolade of 'worst guests ever'. Our guests often shout at the animals, make noises, whistle, and throw things. I once heard a guest egg on their companion to throw something at our tiger *(Panthera tigris)* and heard the other respond 'she's right there' in reference to my uniformed proximity, as though they would have gladly done it if I wasn't standing there. The guest implied they abstained from the harming behaviour out of respect for my human position of authority or perhaps the consequences I might impose on them, but seemingly without consideration for the consequences of potential pain or distress to the tiger. I have witnessed an adult guest bang on the glass and shout at a jaguar in front of me – I of course asked them to stop but wondered how they behaved out of sight of uniformed staff. Several alligator *(Alligator mississippiensis)* residents have undergone surgery to extract inorganic material they swallowed after guests dropped it into their exhibit, either out of carelessness or a deliberate attempt to engage the alligators or motivate some response.

While these interactions don't immediately suggest recognising animal subjectivity, it's possible these desperate bids for the animal's attention are in fact attempts at connection with another subject, albeit done in impolite ways. I have observed more encouraging and pleasant interactions with guests, as well. A guest walking up to the red river hog *(Potamochoerus porcus)* exhibit compared the hog to their pig at home and then spoke to the hog, 'hello baby, how are you?' Many guests say hi and bye to the animals as they approach and leave their exhibits, especially children. Working within the scope of the animal welfare department, I am often stationed near animals exhibiting stereotypic behaviour[1] (pacing, head tossing, chest tapping, etc.) and observe guests frequently attribute mental states to the animals to explain their behaviour amongst themselves ('they must be hungry/angry/excited') or express concerns over the animals' welfare ('they have insufficient space or companionship'), suggesting empathy. These observations fall in line with current thoughts and research on zoo visitors' experiences of connection and empathy with animals at the zoo (Clayton et al., 2008; Howell et al., 2019). Most guests appear to be somewhere in the middle, neither harassing the animals nor relating with them in observable ways.

Conclusion

Based on these observations, zoo employees appear inherently better situated to display recognition of animal subjectivity than guests and do so with some frequency. Keepers especially enjoy intersubjective relationships and work with animals in executing multispecies care work, communicating with one another to tackle daily tasks like shifting, medical procedures, and training, as well as maintaining bonds through affiliative behaviours. I believe I've witnessed the keeper-animal relationship benefit more than husbandry and management, fostering psychological benefits for both human and animal participants, as suggested by current research (Hosey and Melfi, 2012; Riggio et al., 2020; Szokalsi et al., 2012). The keeper-animal relationship appears composed of an intersubjectivity that improves the quality of life for all members of the relationship and is possible only when subjects recognise each other as subjects themselves. Guests show varying levels of evidence

[1] Stereotypic behaviours are repeated, abnormal behaviours that may indicate poor psychological welfare in animals. As such, animal wellbeing departments focus on these behaviours to understand the conditions that may cause them to arise. Welfare departments will then make data-driven recommendations to animal management departments to adopt management strategies that reduce or eliminate stereotypy.

that they may recognise animal subjectivity, and may recognise it without observable evidence, but are less obviously situated to recognise animal subjectivity through the course of their zoo visit than keepers are in their daily work. Recognising animal subjectivity may lead to moral implications such as consideration of an animal right to freedom from captivity. Keepers and guests who recognise animal subjectivity seem to have determined animal captivity is morally acceptable, at least under certain conditions, as evidenced through their continued affiliation with zoos. It's possible these groups subscribe to some form of human exceptionalism, recognising animal subjects as a difference in degree but not kind, and that that degree is sufficient to validate animal — but not human — captivity. These groups might also subscribe to more lenient philosophy than animal rights, like utilitarianism or the capabilities approach, that allows for the moral captivity of some animals under certain conditions involving high welfare standards, which is where I currently position myself.[2]

While this study can help us start to think about how zoo affiliation might relate to recognising animal subjectivity, there are limitations to the study. The considered observations and experience happened at a single AZA zoo in a U.S. city and may not be transferable to other facilities or locations, where different work and local cultures, laws, guiding and accrediting agencies, or even predominant religious traditions might impact behaviour or perceptions. Most importantly, the study only measures signs of recognising subjectivity and not the recognition of subjectivity itself. In much the same way that a keeper can only truly guess at the mind of their animal charge, I could only guess at the beliefs of the observed humans through their observed behaviour. I did not interview guests or employees and I never explicitly asked 'are nonhuman animals subjects?' It's possible that guests I observed engaged in behaviour that suggested they did not view animals as subjects, might actually recognise animal subjectivity that was not captured in the scope of this study, or that keepers' behaviours I considered evidence of recognising subjectivity are evidence of some other internal belief instead. Future studies may interview these groups to ask more directly their opinions on animal subjectivity, determine which philosophical school of thought they may subscribe to, attempt to quantify these affiliative differences, or consider the role of ethnicity, nationality, or facility type (accredited, roadside, etc.) on recognition of animal

[2] Whilst not all vegan ethics align with support for zoological collections, I subscribe to a capabilities approach to utilitarianism and believe that well-managed zoos have the potential to create great aggregate benefit while minimising harm through the pursuit of good animal welfare. I explore this paper through this particular and personal ethical lens.

subjectivity. Because record keeping practices vary among institutions, researchers can investigate if different record keeping practices using animal names and pronouns (versus avoiding them) impact employee perspectives on animal subjectivity. Future research may also investigate if recognising animal subjectivity affects zoo employee perspectives of their jobs, or if it impacts guests' tendency to adopt conservation caring behaviours or the physical or psychological benefits they receive from a visit to the zoo.

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The call of the other: Intercultural strategies for interspecies communication

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While research into animal and interspecies communication continues to yield fascinating results, the notion of 'animal languages' remains controversial due to the long intellectual tradition of a linguistic human-animal divide in 'Western' thinking. Yet, growing evidence for other animals' remarkable communicative abilities challenges perceptions of them as mute or voiceless. Taking these discussions as its starting point, this paper explores how intercultural and interspecies communication resemble each other by drawing on interviews with Austrian animal welfare advocates who have experienced interspecies dialogue unfolding in the field. This empirical data is mapped onto intercultural communication theory to identify strategies for interspecies communication that can help us overcome species differences and anthropocentric ideas about 'animal otherness'. In doing so, I argue that other animals do indeed speak and aim to show that listening to their voices brings with it the moral responsibility of responding to them as articulate, sentient individuals.

Keywords: animal languages, interspecies dialogue, intercultural communication, otherness, animal ethics

Introduction

Pigs grunt, cows moo, chickens cackle. Sounds that we so readily associate with these animal species that children learn to recognise them by their 'signature vocalizations' (Menely, 2015: 19). While this is symptomatic of our human tendency to broadly categorise and stereotype otherthanhuman animals (henceforth animals), it likewise testifies to their ability of making sounds and producing communicative signals. And just like them, humans produce sounds that we define as words, speech, language. From a zoosemiotics perspective, all these sounds can be characterised as semiotic behaviour that serves the purpose of intra- as well as interspecific communication (Maran et al., 2011; 2016). In this basic sense, our human forms

of speaking resemble the grunting, mooing, and cackling that my paper will attend to more closely in an attempt to better understand what interspecies communication might be and how it can help us relate to animal others – as more than abstract significations that produce stereotypical sounds.

The question of whether our species, *Homo sapiens*, can engage in interspecies communication by learning to listen and speak to animals is, of course, a complex matter. As scholars reflecting on the 'animal-human gap' (Willett, 2014: 125) and '[t]rans-species living' (Bradshaw, 2010: 408) suggest, it might just as well be a matter of remembering – recalling those deep interspecies connections our ancestors in the past and indigenous peoples in the present were and are still aware of, attuning anew to what David Abram poetically describes as the 'chattering, whispering, soundful depths' of the morethanhuman world (1997: 80). However, caught up as most of us are in discourses and scientific practices rooted in 'Western' thought, we are tasked not so much with remembering but rather with (re-)establishing a basis for thinking about and engaging with interspecies communication in this context. This task entails far-reaching and multifaceted questions: How do we interpret the communicative signals of animals? What counts as understanding and what might be human misconception or over-interpretation, tinged with anthropomorphism? And how do we conceptualise 'language', 'animal', and 'human' in our discussions of interspecies dialogue?

In their complexity, these and related questions trouble not only species but also disciplinary boundaries. They can – and need to – be addressed from multiple perspectives and call for approaches that embrace challenges and controversies, both of which abound when it comes to research into animal languages and interspecies communication (cf. Kulick, 2017). To date, this research ranges from initially enthusiastic but soon contested animal language experiments (Pepperberg, 2017) to current interdisciplinary efforts, such as the 'Interspecies Internet' project that brings together experts across disciplines in order to improve our understanding of animal languages.[1] Research on human-like linguistic capacities in great apes[2] was predated by the influential work of ethologists like Konrad Lorenz, who

[1] The 'Interspecies Internet' (https://www.interspecies.io/) is a 'multidisciplinary global think-tank' that connects professionals around the globe to advance research on interspecies communication. Involved in the project are experts who have contributed significantly to animal language studies, such as Irene Pepperberg (known for her work on avian cognition and language acquisition) and Con Slobodchikoff (Founder and President of Zoolingua, Inc).

[2] Notable ape-language research projects include Francine Patterson's work with the gorilla (*Gorilla gorilla*), Koko, whom she taught to use American sign language (e.g. Koko' Story, 1987), Nim Chimpsky, a chimpanzee (*Pan troglodytes*) trained by Herbert S. Terrace and his team

pioneered research on animal behaviour and communication, and it is complemented by studies on other animal species, including parrots (e.g. Pepperberg, 2002) and dolphins (e.g. Herman, 2010). To this list of systematic experimental studies carried out by behavioural researchers and psychologists, one could add other recent approaches in the social sciences, for instance by linguists (Pennycook, 2018; Cornips, 2019) and researchers in communication studies (Plec, 2013).

Meanwhile, scholars in the humanities have contributed to interspecies communication research as well, with notable work undertaken in philosophy that links animal voices to ethical, social, and political questions (Midgley, 1984; Meijer, 2017 and 2019b; Suen, 2015). Each of these perspectives constitutes a piece in the 'disparate' and 'unruly' (Kulick, 2017: 358–359) puzzle that is human-animal communication. Drawing these puzzle pieces together, my paper builds on the enrichingly diverse work already done to investigate animal languages and dialogue across species boundaries through the lens of intercultural communication. Thus, my approach is further informed by ideas taken and adapted from intercultural communication theory which I will expand on in the second half of this paper. The first half is dedicated to a brief reflection on language and the human-animal divide, followed by a discussion of the fieldwork which lay at the heart of my research project, designed to add a tangible, practical dimension to it. My aim in combining a theoretical approach with actual examples of interspecies communication is to bring in the 'real' animals – to make them visible and their voices more salient in research that, after all, focuses on what they might be saying to us. As Lori Gruen reminds us in *Ethics and Animals*, speaking of animals in collective terms, such as species categories, creates 'abstractions' of them that seem distant and disconnected from us (2011: 206). This can make us lose sight of these animals as individual living beings who deserve to be recognised and treated as such. By considering them as speaking subjects, I wish to highlight how research into the communicative abilities of animals can make us appreciate the complexity of their social lives and interactions, as well as the possibility of forming meaningful relationships with them.

In this, my study aligns itself with the aim of practicing anthrozoology as symbiotic ethics, stressing the importance to recognise animals as 'ethically significant beings' (EASE,

to learn sign language, and the research of Sue Savage-Rumbaugh that involved teaching the bonobo (*Pan paniscus*), Kanzi, how to communicate using lexigrams (e.g. Ape Language: From Conditioned Response to Symbol, 1986).

2021). Throughout this paper, I highlight how listening to their voices is a possible way of doing so and of increasing our awareness as human researchers that animals are not merely 'the researched' (Birke and Hockenhull, 2012: 6). They are individuals whose perspective and active presence matter and need to be factored in if we aspire to understand them better. Heeding Lynda Birke's and Jo Hockenhull's note of caution that by positioning 'nonhumans as other […] research in human-animal studies will usually be anthropocentric' (2012: 6), I hope to decentre the human in the following pages, placing animals and humans alongside each other and conceiving of both as equal partners in their encounters and unfolding conversations. Even those passages that speak of animals – or specific species – rather generically are written with the individual representatives of each species in mind. Because it is them who made this research possible and who contributed just as much to my fieldwork as did the human interviewees.

Terminology, categories, and the linguistic human-animal divide

Given the variety of approaches to the study of communication between animals and humans outlined above, it does not come as a surprise that scholars and scientists have assigned diverse names to it. The label 'interspecies communication' appears repeatedly in the literature (Argent, 2012: 113; Midgley, 1984: 54; Meijer, 2017: 13), as do similar terms like 'trans-' or 'cross-species communication' (Rudy, 2012: 149; Willett, 2014: 14) and 'trans-' or 'interspecies dialogue' (Bradshaw, 2010; Donovan, 2017). In contrast to these mostly equivalent terms, I would argue that the label 'human-animal communication', used for instance by Don Kulick (2017), conveys not quite the same meaning. By naming humans explicitly as one of the animal species involved, one narrows the scope down from 'interspecific communication' (Sebeok, 2011) in a broad sense – that is, any kind of semiotic meaning exchange across species boundaries – to communicative exchanges between all animals on one side and humans as privileged species on the other. What makes this term problematic, therefore, is the biologically untenable human-animal distinction it upholds, a fundamental dualism already identified as misleading by Jacques Derrida (2008: 23–34, 47–51) in *The Animal That Therefore I Am*, and further challenged in academia following the 'animal turn' (Weil, 2012: 3–24, see also DeMello, 2012: 32–43 and Waldau, 2013: 16–20).

If a narrow conception of human-animal communication constitutes one end of the spectrum, then Emily Plec's (2013) considerably broader concept of 'internatural communication' marks the other. In choosing this label that not only embraces communication between different animal species but also 'among animals and other forms of life' (Plec, 2013: 5–6), Plec accentuates that humans inhabit a lively 'more-than-human world' full of sounds and voices – messages exchanged between myriad living organisms. Further, the term 'internatural communication' lends itself to a comparison with intercultural communication, and Plec indeed draws parallels between the bridging of differences involved in both forms of communication – be it differences between 'cultures' or 'natural communities' (2013: 5). My paper takes up this observation that intercultural and internatural or interspecies communication share the core characteristic of being concerned with differences and otherness. This means taking into account that individuals not belonging to the same culture or species will have to cross a boundary between them, indicated by the 'inter' prefix (Latin 'between, among') in both cases. One might argue that this makes the terms problematic in themselves, given that both cultures (Piller, 2017: 5–10) and species can be problematised as constructed rather than ontologically given categories 'fixed by nature' (Gruen, 2011: 50–54), resulting in perceived and linguistically substantiated separations. However, retaining the 'inter' prefix in both *inter*cultural and *inter*species communication allows us to highlight and question the common assumption that boundaries between 'us' and 'them' exist. As long as these boundaries are perceived they will remain in place unless we explicitly challenge them – rather than just glossing over them by avoiding certain terms. As a way forward, I, therefore, propose forms of communication that do not negate but embrace differences. Which – in the case of interspecies communication – requires fine-tuning our senses to this paper's eponymous 'call from an animal Other' (Calarco, 2015: 40) upon which Derrida (2008) reflected when being watched by his cat companion.

What the similar but not identical labels for interspecies communication have in common is that neither of them makes direct reference to language. And yet, discussions about animal languages – along with the question of whether animals have the capacity for human-like speech – keep resurfacing in studies of interspecies communication, almost as if there was something inevitable about it. It appears that this inevitability stems from the long intellectual tradition in 'Western' thinking of drawing a linguistic divide between humans and

animals, relegating the latter to a sphere outside of language populated by mute creatures, incapable of speech (Derrida, 2008: 18–20; Fudge, 2002: 117–118; Meijer 2019b: 15–32; Weil, 2012). Such lines of argumentation for separating humans from every other animal species on Earth along the boundary of *logos* (i.e. rational speech, reason) can be traced back to antiquity when Aristotle ascribed voice – *phonè* – to all animals but *logos* only to humans (see Calarco, 2015: 7–11).

Yet, this separation that reserved reason and language for humans did little to solve the matter. Instead, 'Western' philosophers kept circling back to the language question in their reflections on *being human* – and, time and again, to the animal lurking at the heart of it. For some, animals remained necessarily silent, as the animal automatons in Cartesian philosophy (cf. Donovan, 2017: 209), while others ventured to speculate what animals might say and whether humans would be able to understand them. Ludwig Wittgenstein, for instance, famously mused that 'if a lion could talk, we would not be able to understand [him]' (2009: 235). Various interpretations of this quote from Wittgenstein's *Philosophical Investigations* have been put forth, and Cary Wolfe (2003: 44) starts his reading of the passage by pointing out how easily it might be misread. He suggests that Wittgenstein's philosophy 'unsettle[s] the ontological difference between human and animal' and that language 'keeps that question alive and open' (Wolfe, 2003: 47) rather than providing the tool to settle it once and for all.

In another twist on the essential language question exemplified by Wittgenstein's lion, Erica Fudge asks no longer whether they – the animals – can speak, but what would happen '[i]f we could hear them speak' (2002: 127). Despite our 'desire for communication' with animals that Fudge explores, we would probably soon realise that we do 'not want to hear what they say' (2002: 7, 127). And if we still wanted to understand them, why expect animals to speak in human tongues instead of trying to learn their languages? This challenge, Fudge writes, unsettles our 'inbuilt superiority' grounded on linguistic premises and opens up a channel for 'communication in the other direction' (2002: 128). Searching for such a channel and seeking to legitimise the notion of animal languages, Eva Meijer, too, draws on Wittgenstein's work, specifically his concept of language games. It could, she argues, be applied in 'interspecies contexts' to account for 'non-human animal agency in language' and animal forms of meaning-making (Meijer, 2017: 45), thus improving interspecies

communication. Such attempts to make animal voices heard and to integrate them in language philosophy are noteworthy and necessary, given the ever more salient *logocentrism* that, over time, manifested itself in our thinking and can be defined as 'an uncritical focus and overemphasis on *logos* […] and its associated capacities and faculties' (Calarco, 2015: 22, original emphasis).

As a result, language became an integral element of human identity, a species-specific trait that makes us human and that sustains notions of 'human exceptionalism' – a view of humans as unique and apart from all other animals (DeMello, 2012: 33). Conversely, language became human by definition. Scholars discussing the linguistic human-animal divide have not failed to point out the problematic circularity of this reasoning (Meijer, 2017: 14; Pennycook, 2018: 16). Anthropologist Barbara Noske already observed in *Beyond Boundaries: Humans and Animals* that making claims about the lack of language in animals based on a definition of language as human language 'would be anthropocentric and circular' (1997: 133). It amounts to little more than demonstrating that when applying concepts formulated *by* humans *for* humans, 'animal forms of thought and language have already been pre-empted by definition' (Noske, 1997: 83). Which leads Noske to argue that animals should not be 'measured by *our* yardsticks' (143–144, original emphasis) and not be expected to live up to human standards. Instead, work on animal languages and communication needs to foreground the animals' own experiences and their perception of the world. Notably, Noske ends her book with a reference to American zoologist Donald R. Griffin who studied animal cognition and awareness. Griffin (1981) likens the work of an ethologist aiming to decipher animal communication to that of anthropologists encountering a human group speaking a language unknown to them. To him, it is surprising that anthropologists have not paid more attention to these situations and the 'first steps needed to establish linguistic contact' (Griffin, 1981: 150). Noske (1997: 169–170) adds that improving our understanding of such human-to-human encounters could also be beneficial for how we approach interspecies communication.

Just like Plec, Griffin and Noske noticed the parallels between situations of intercultural and interspecies contact which warrant further comparative exploration. Any endeavour of this kind, I suggest, needs to factor in the debates over animal languages just sketched out. Even if a greater part of interspecies communication might not involve verbal

language, unfolding instead on a nonverbal level as we shall see, questions about whether and how animals speak cannot be separated from the ethical, social, and political implications of the way we define language. Otherwise, we risk overlooking the fraught ideological underpinnings of language definitions that reserve linguistic capacity for humans alone, thereby affirming cognitive frameworks within which a sense of human superiority justifies the exclusion and exploitation of animals (cf. Cornips, 2019). Herein lies the potential of research into animal languages and interspecies communication: it poses a 'challenge to human uniqueness' (Kulick, 2017: 372–373) and offers a counter-narrative to the logo- and anthropocentric reasoning that so far disregarded nonhuman forms of consciousness and meaning-making. Studies that subvert these dominant narratives cast the variety of animal forms of communication (e.g. Balcombe, 2010: 83–101 or Meijer, 2019a) in a new light, and trouble common perceptions of animals as voiceless others.

To venture into a semiotic space of 'interspecies languages' (Meijer, 2017: 67) shared with animal others, we do not simply need to move beyond linguistic frameworks but to understand how these interfere with and might distort our communicative encounters with animals. Sanctuary volunteers working with parrots, for instance, stated in an ethnographic study that a parrot's ability to use human language can distract from bodily cues 'far more important for understanding how they feel' (Langford, 2017: 87). This observation confirms that language, as arguably one of humans' most potent 'social imaginaries […] can create blinders' (Smith and Mitchell, 2012: 344). Such blinders complicate our relations with others – be they animals or humans – and can cause misunderstandings or alienation. Moreover, a downside of our language-centred existence is its potentially 'dulling effect on the rest of our perceptions' (Balcombe, 2010: 93–94). In fact, a wealth of 'sophisticated and versatile forms of animal communication' (Noske, 1997: 133–134) might be lost on us because our senses are not as keen as those of other animal species. However, language and response are in their essence also relational,[3] fostering connection across boundaries and despite differences. It is this lived experience of being responsive and thereby relating with animal others that I will

[3] The relational quality of language and communication is, for instance, reflected in Kelly Oliver's (2009: 77) approach to ethics as grounded on 'response-ability' which she links to subjectivity and the individual's responsibility connected to it (cf. also Robin W. Kimmerer's thoughts on language as humankind's gift and responsibility in *Braiding Sweetgrass*, 2013). Responding to animals and respecting them as equally responsive – and subjective – beings thus becomes humans' ethical responsibility towards them, upon which Oliver (2010) bases her arguments about an 'ethics of responsiveness'.

turn to in the next section, exploring the possibilities for interspecies relationships cultivated in the field.

Conversations on the pasture

For this project, I conducted three semi-structured interviews[4] with Austrian animal welfare advocates who care for rescued farmed animals. Two of them run a farm sanctuary for pigs (*Sus domesticus*) and cows (*Bos taurus*) in Lower Austria, and the third lives in Tyrol where he turned his backyard and garden into a sanctuary for chickens (*Gallus gallus domesticus*) formerly kept as laying hens. Recent multispecies ethnographic studies of farmed animals in sanctuary environments have focused on questions of agency (Blattner et al. 2020) and positionality (Gillespie, 2019), yet to my knowledge none have looked explicitly at interspecies communication. What the authors do address are key challenges of any research project that aims to include animals' perspectives and voices – such as asking about the 'status of anecdotal information from human informants' (Blattner et al., 2020: 6). This is a limitation of my study I am quite conscious of, even though researchers have pointed out the usefulness of anecdote as 'a remarkable resource' (van Dooren et al., 2016: 8). And I am, in fact, less concerned about the interviews' anecdotal quality than about the animal experience being mediated by humans.

While multispecies ethnographers continue to search for ways of working around this human bias inherent in established research methodologies (cf. Hamilton and Taylor, 2017), I recognise that by choosing to use interview data my findings still rely very much on humans speaking *for* animals. This involves a high 'risk of mistranslation or misinterpretation' (Suen, 2015: 20), risks that Josephine Donovan considers in her writings on feminist care ethics and interspecies dialogue as a means to attend to the 'animals' own expressed opinions' (2017: 208). She holds that modes of care theory such as 'sympathy, empathy, and attentiveness' (Donovan, 2017: 213) can enable humans to interpret animal languages and to understand their needs and preferences. In line with this notion, I approached interviewees who dedicate themselves to living with and getting to know their animal companions in order to reduce risks of anthropocentric misconceptions as much as possible. Further, what needs to be

[4] The interviews conducted for this study followed the same set of questions, yet the semi-structured quality of the conversations left room for additional questions and remarks. The interview duration varied from 20 to 40 minutes, all responses were audio-recorded and transcribed, including a translation from German to English (where necessary for direct quotes to be included in the paper).

factored in are the conditions under which humans encounter farmed animals, as these differ from interspecies encounters in the wild. As Margo DeMello writes, domesticated animals are 'owned and controlled by humans in a human cultural environment' (2012: 87), and their dependency on us for food and care may shape the kind of interactions taking place. Keeping these limitations in mind, I asked the interviewees to reflect on their interactions with the cows, pigs, and chickens, and to comment specifically on communicative aspects. Several common threads emerged which I organised into three clusters of related ideas, revolving around the role of space, time, and attentiveness in building interspecies relationships.

Figure 1: Former cattle farmer Hubert among his bovine companions who seem quite at ease in his presence. Photo courtesy of 'Happy Pigs & Friends' (rinderwahnsinn.at).

Exploring spaces of trust

Space here refers primarily to a safe, species-appropriate physical environment provided to the animals where they can flourish and live as autonomously as possible. Each interviewee stressed the importance of this as a basis for mutual trust and the emergence of interspecies bonds. Accordingly, they consider it their responsibility to ensure that the cows, pigs, and chickens are well cared for, always have access to food and fresh water, and can move around in their space at free will, never forced to

interact with their human caretakers. For example, former cattle farmer Hubert (Figure 1), now responsible for the sanctuary cows, is often concerned about them during the summer months when intensifying heat waves cause the pastures to dry up, and the cows and oxen struggle with unusually high temperatures. Extremely low temperatures in winter, on the other hand, can be a problem for chickens, explained interviewee Harald, because their combs could freeze off unless treated with a salve against the cold. Not all chickens approve of being handled like this, however, and Harald says he respects their choice if they prefer to remain distanced. He emphasised that each hen and the flock's rooster have individual personalities, some preferring to stay away from humans and others quite curious and happy to make contact, as can be seen in the images of Sudoku (Figure 2) and Wilma (Figure 3).

Sudoku's and Wilma's curiosity about their environment brings to mind that meanings of space are likewise determined by individual perception. Drawing on Jakob von Uexküll's theory of *Umwelt* and how meaning emerges for each animal within their 'subjective realities' (Uexküll, 2010: 126), Donovan argues that interspecies communication requires an understanding of how animals subjectively experience their surroundings and 'construe meaning within that world' (2017: 217). For interviewee Stefanie (Figure 4), who rescued the six pigs now living at her and Hubert's sanctuary, this involved learning about what being a pig means – how pigs move, what their needs are, and how they behave in certain situations. Like Harald, Stefanie spoke about getting to know the pigs individually, appreciating their distinct personalities and how each of them differed in how quickly and how willingly they made contact with her and other humans.

Figure 2: Sudoku looking in through the window to see what her human companions are up to.

Figure 3: Wilma on her way to visit her human companions in their own 'henhouse.'
Both photos used with permission from Harald Stoiber (www.derhuehnerphilosoph.at/blog).

Forming relationships over time

Stefanie's observations tie in with a second cluster of responses related to time. She explained how spending time close to and with the pigs was key in getting to understand them – and vice versa. She realised that not only was there much she had to learn about pigs but also the pigs needed time to get accustomed to her presence. Gradually, they learned to communicate with each other, the pigs getting better at interpreting her human behaviour and Stefanie picking up on their nonverbal cues which she started to imitate, for instance when trying to make the pigs aware of something. Hubert, too, linked communication and interspecies understanding to time when he observed that interpreting the cows' signals gets easier 'if one lives with the animals long enough and watches them long enough'. So did Harald, who became more and more familiar with chicken calls and their meaning through observation, and says that by spending time around the flock, he and his wife also give the chickens the opportunity to get to know them better.

What each of them described is a growing awareness and mutual attunement between the animals and themselves, made possible by many hours spent in each other's presence. The interviewees' experiences thus resemble the kind of bodily attunement that Vinciane Despret termed 'embodied empathy' – a connection between responding bodies 'creating the possibilities of an embodied communication'[5] (2013: 51). Despret makes a case for the crucial role of an observer's 'concrete "presence"' (2013: 52) which manifests in many ways – smell, noise, movement – all of which are perceived by and affect the animals who are also active observers, not just those being observed. Bodily presence matters because it allows for 'reciprocity' (Despret, 2013: 53) in human-animal encounters and relationships, and Stefanie, Hubert, and Harald realised this in their interactions with the pigs, cows, and chickens. They emphasised how being present within the animals' space over longer stretches of time deepened their relationships and enhanced their ability to communicate across species boundaries. Donovan (2017: 214–215) refers to similar processes when highlighting the importance of 'personal encounter' between individuals, and Hamilton and Taylor (2017:

[5] Despret's (2013) concept of 'embodied empathy' recalls an earlier body-oriented approach to animal communication and human-animal relations formulated by Kenneth Shapiro who coined the term 'kinesthetic empathy' for 'empathiz[ing] with the bodily pole of an animal's experience in order to arrive at a sense of the world as experienced by the animal' (1990: 28-29).

122) consider such ‘sensory and embodied methods’ as promising new pathways in morethanhuman ethnography (see also Bastian et al., 2017: 2–3).

Figure 4: Stefanie and Katharina enjoying each other’s company. Photo courtesy of ‘Happy Pigs & Friends’ (rinderwahnsinn.at).

Cultivating respect and attentiveness

The relevance of watching and engaging with the animals over longer periods of time overlaps with a third cluster of ideas centring on respect and attentiveness. Stefanie, Hubert, and Harald stated that simply spending time with an animal is not enough to facilitate interspecies communication. Their responses suggest that, in addition to mere proximity of human and animal, our human attitudes towards another animal matter because they can strongly influence the quality of any interspecies relationship. Stefanie, for instance, made quite clear that for her all animals are ‘equal living beings’ and that this attitude guides her behaviour when she interacts with the pigs. She approaches them with respect and is careful not to infiltrate their ‘private sphere’ – as one would if the Other in question was a human being. At the same time, Stefanie is apparently careful not to treat the pigs as if they were humans, as indicated by her remarks about the need for self-reflexivity in our encounters with animals.

To her, it is essential that humans look inwards, becoming aware of how our norms and expectations inform our interpretations of animal behaviour. She explains that an outstretched hand might be 'something friendly' for a human but not necessarily for a pig. Stefanie seemed very much aware of the differences between her pig companions and herself, respecting them in their otherness and not trying to appropriate it by perceiving the pigs as human-like.

The case of Hubert and the cows probably best illustrates how human attitudes and treatment of animals can negatively – or positively – impact relationships. As a former cattle farmer, Hubert used to take the cows and oxen to slaughter until he could no longer bear the thought of having them killed. When he stopped producing meat, Hubert recounted, the animals' behaviour changed drastically. Not only did each herd's cohesion improve, the cows and oxen establishing lasting friendships, but they also became 'more approachable' around Hubert. Since then, he has formed closer relationships with 'his' animals whom he always cared about and whose individuality he appreciates, knowing quite well that some enjoy contact with humans whereas others 'do not like to be touched'. Like Stefanie, Hubert repeatedly expressed his awareness that cows are not like humans – they have their own social dynamics and 'speak a wholly different language'. Yet, this difference does not make them deficient (cf. Kulick, 2017: 373) in Hubert's eyes, and he does not doubt that they 'communicate among each other', even if he, as a human observer, might only be able to understand a fraction of what they are saying.

Interviewee Harald, too, described the language of chickens and likened learning it to attempts at grasping the basics of a foreign language by paying close attention to a person's gestures, facial expressions, and behaviour. Harald practices this kind of attentiveness when spending time with the flock and is able to identify a couple of chicken calls by now, some of which – especially their alarm call or the rooster's distinctive *pock-pock-pock* when he has discovered food – can be imitated by humans. But, Harald said, using their alarm call will startle or even scare the hens, so he prefers to simply 'chat with them' in human language, 'even if they obviously do not respond' as a human would. Yet, while Harald acknowledges that the chickens do not speak like humans, he still perceives them as dialogue partners. He explained this impression by describing the expressivity of a chicken's gaze and how this gaze, when directed at him, conveys a certain 'expectation' and a willingness to communicate.

Thus, Harald interestingly framed his own talking as a response to the chickens' nonverbal prompt to start a conversation. For these to take place, full comprehension of what the other is saying does not seem to be required – as indicated by Harald's uncertainty about how many of his words the chickens can understand, and his remark that many of their sounds are difficult for him to interpret. What is striking about their encounters is that the lack of a shared language does not preclude some degree of interspecies understanding, since both the chickens and Harald have nevertheless discovered ways of communicating their intentions to each other. In the following section, I examine these communicative strategies more closely, considering how they resemble forms of intercultural communication and what this might teach us about interspecies dialogue.

Speculations on paper

Moving from conversations on the pasture to theoretical speculations on paper, this section focuses on the resemblance between intercultural and interspecies communication, already touched upon earlier. These observations are based on the interview data just discussed on the one hand, and on intercultural communication theory on the other, drawing primarily on textbooks that cover both verbal and nonverbal levels of communication (e.g. Martin and Nakayama, 2013; Neuliep, 2015; Sadri and Flammia, 2011). It is this second dimension of communication without words but via movement, gestures, eye contact, and similar nonverbal cues that is of particular interest here, considering the important role the interviewees ascribed to nonverbal behaviour in their interactions with the animals. When individuals meet who do not share a language, they are likely to realise that nonverbal behaviour gains significance if we reach the limits of verbal communication. This is arguably the case in most interspecies encounters, as evidenced by my interview data. Even for Stefanie, Hubert, and Harald, convinced that cows, pigs, and chickens have languages of their own, understanding their animal companions is not always easy because they speak different languages. In this sense, their interactions do resemble intercultural encounters between people from different countries and cultural backgrounds who will need to overcome a similar language barrier if neither of them speaks the other's language. As Noske remarked, drawing on Griffin's (1981: 150) observations about first encounters between anthropologists and the human groups they study, these situations have much in common with human-animal

interactions and could therefore prove insightful for interspecies communication (Noske, 1997: 169–170).

Building on this idea, it is worthwhile to take a closer look at the role of the nonverbal code in intercultural communication which is understood here as an interaction between participants whose cultural difference 'is made relevant by and to [them]' in the communicative process (Piller, 2011: 9). What first appears like a secondary communicative channel – assuming that to learn a foreign language would be the most direct way of improving intercultural understanding – turns out to be vital even when speakers share a language. James Neuliep (2015: 280–284) explains that nonverbal cues carry meaning in relation and in addition to what is expressed verbally, and evidence suggests that nonverbal signals convey more than half of a message's information content (Sadri and Flammia, 2011: 160). This happens in a mostly subconscious process, and part of the information we receive nonverbally are 'relational messages' about how the speaker feels about us and wants to be perceived (Martin and Nakayama, 2013: 276–277). Because a message usually combines verbal and nonverbal signals, misunderstandings can occur if these do not match. When one's nonverbal behaviour contradicts that which is being said, people tend to trust the nonverbal message, perceiving it as more authentic and honest (Neuliep, 2015: 282). Langford thus rightly identifies verbal language as 'one of the least reliable forms of communication for reading feeling, intention, or desire' (2017: 97) – not exactly the key to another's subjectivity which it is taken to be.

This means that, at least subconsciously, humans pay constant attention to what is going on at the nonverbal level in a conversation. And – if one defines nonverbal communication broadly as 'messages people send to one another that do not contain words' (Neuliep, 2015: 281) – quite a lot can go on there. Neuliep lists eight channels for conveying nonverbal messages which include 'kinesics, occulesics, paralanguage, proxemics, haptics [and] olfactics' (2015: 281). In other words, nonverbal communication involves gestures and other bodily movements, eye contact, vocalisations that do not qualify as language per se, space, or rather the spatial relationship between speakers, touch, and smell. Most of these were already recognised by Charles Darwin as channels for emotional expression in animals, as Donovan (2017: 215–216) points out, and so can transport meaning in interspecies communication as well. Many animal species are even better adapted than humans to these

forms of nonverbal communication. Horses, for instance, are more perceptive of movement and touch, experiencing the world in 'tactile images', just as canines who communicate via scent do so in 'olfactory images' (Noske, 1997: 158). Their ways of perceiving and relating are certainly very different from what we – as humans – are used to, and yet our reliance on nonverbal communicative signals indicates that there is plenty of common ground between us.

The practice of categorising sounds that do not constitute (human) words as 'paralanguage' is also noteworthy, particularly in the context of animal language debates. Even if we assume that animals have no verbal language in a narrow sense, their vocalisations can still qualify as meaningful paralinguistic signals (cf. Martin and Nakayama, 2013: 286–287). Why is it, then, that the expressiveness and significance of nonverbal behaviour is acknowledged in intercultural contexts but doubts about the potential of interspecies communication, which arguably relies on very much the same channels, persist? A sceptic might reply that animals are just too different from humans and interacting with them cannot be compared to intercultural encounters between members of our species. Arguments of this kind foreground animal otherness, and thereby link interspecies communication to another key aspect of intercultural communication – the process of Othering. As Adrian Holliday (2011: 69–70) explains, 'Othering' involves marginalisation, discrimination, and exploitation based on differences between an in-group and one or several out-groups. Accordingly, Othering can be useful for thinking through the construction of animal difference as a justification for exclusion, and for carving out the qualitative difference between Othering animals and expressing a sense of animal otherness, as the human interviewees did.

In each interview, the awareness of essential differences between the human caretakers and their animal companions emerged, linked not to notions of human superiority but rather to the recognition of animals as beings in their own right, different from yet not inferior to humans. For Stefanie, Hubert, and Harald, recognising their companions' *animalness* seemed integral to the process of respectfully and ethically relating to them, without overly humanising them – accepting rather than rejecting their otherness. In contrast, Othering as a central concept in intercultural communication theory stresses the dynamics of exclusion set in motion when 'constructing, or imagining, a demonized image of "them", or the Other, which supports an idealized image of "us", or the Self' (Holliday, 2011: 69). Here,

power imbalances can arise, and the dominant group often instrumentalises differences to brand the customs and behaviours of other groups as 'deficient', while their continued marginalisation can lead to 'commodification'. The parallel between othering cultural groups and animals is probably most strongly reflected in this last key word which Holliday (2011: 84) uses to refer to the appropriation of foreign cultures as commodities. The term could equally be applied to animals whom humans routinely (ab)use for their purposes and who, in the case of farmed animals specifically, are commodified in the most objectifying sense – being turned from living beings into consumable products (cf. DeMello, 2012: 126–145; Gruen, 2011: 76–82).

In this case, Othering is used to exclude farmed animals from moral consideration, turning their difference from humans into a justification for their continued exploitation. Yet, as Noske cautions in *Beyond Boundaries*, 'Otherness can never be an excuse for objectification and degradation' (1997: 170), and scholars specialising in intercultural communication do recognise the harmfulness of Othering when directed against humans. Animals, however, are conspicuously absent from their discussions of discrimination and commodification, indicating that even when aware of these dangers, humans may remain blind to similar processes of Othering that negatively affect animals. This brings with it the danger of – indirectly – becoming complicit in their oppression, as exemplified by Ingrid Piller's argument that language sets humans apart from animals and that, consequently, the 'seeming speechlessness of the linguistic other has at times invited extreme cruelty' (2011: 148). Piller's reasoning here seems to assume that cruelty against the voiceless – a category into which she places all animals except humans – is a given. Thus, it is important to recognise how, in many ways, animals have become 'a limit case for theories of difference, otherness, and power' (Weil, 2012: 5) and call on us to extend our concerns beyond marginalised human groups affected by mechanisms of exclusion. Intercultural communication theory can help us perceive these parallels and identify the harm done to humans and animals alike.

While Othering interferes with understanding and can therefore turn into an obstacle for both intercultural and interspecies communication, avoiding it is not equivalent to disregarding the 'otherness' of animals entirely. The interviewees' responses reflect that they are very much aware of the differences between their animal companions and themselves, acknowledging them as *others*, just as cultural *others* are different from us. Yet, intercultural

– and interspecies – communication is about learning to see otherness differently, encouraging the 'flexibility of mind which allows us to cross borders and accept differences' (Bredella, 2003: 38). Cultural diversity is what makes intercultural communication challenging but rewarding, and the same holds true for communicating across species boundaries. Just like travelling, Meijer (2019: ix) writes, meeting other animals is a form of experiencing foreign cultures. Taking this parallel further, she speculates that understanding humans from another culture may even be harder for us than interpreting the behaviour of an animal companion whom we know very well (Meijer, 2019: 5) – because experience plays a key role in relating to someone, regardless of whether they belong to another culture or another species. My findings support Meijer's observation that the 'quality of the communication or closeness of a relationship' does not depend on species membership (2019: 122). Rather, they depend on shared experiences, time spent together in spaces of trust, and attentiveness that nurtures understanding and acceptance of otherness.

Conclusion

My aim in writing this paper was twofold, as was the combination of a theoretical and practical approach to questions of interspecies communication. Firstly, I aimed to demonstrate how growing interest in animal languages and morethanhuman forms of communication unsettles already porous boundaries between humans and animals which, to a considerable extent, have been constructed on an alleged linguistic divide between *Homo sapiens* and all other animal species. This part of my argument drew on strands of thought taken from the works of scholars and theorists I am very much indebted to for their pioneering work on the topic of animal and interspecies communication (including Cornips, 2019; Meijer, 2017; 2019a; 2019b; Plec, 2013; Weil, 2012). Secondly, departing from these authors' valuable insights, I evaluated the data elicited as part of my fieldwork to develop a tentative theory of interspecies communication modelled after existing theories and strategies for intercultural communication. In this, my approach resembles that of psychologists who apply analytical frameworks for human intergroup relations to the study of human-animal interactions based on the parallels with human group dynamics they have discovered (e.g. Amiot and Brock, 2017).

Adapting intercultural communication theory in a similar fashion to human-animal encounters, I found that its applicability to interspecies communication is most salient when it comes to nonverbal communicative behaviours and exclusion based on differences, referred to as Othering in intercultural communication theory. Since both intercultural and interspecies communication are characterised by encounters between individuals who differ from each other in significant ways, otherness and our responses to it play a key role in both cases. Yet, I argued, within theoretical frameworks that discuss contact between the 'Self' and the 'Other', only the crossing of cultural boundaries is generally deemed possible and even desirable, while the crossing of species boundaries remains controversial or unaddressed. My paper picked up on this gap in the literature to ask what intercultural communication can teach us about interspecies contact and how strategies commonly applied in intercultural contexts might enable us to become more adept in conversing with our animal others.

Over the course of my research, I found that helpful lessons taken from intercultural communication theory include the need to pay close attention to nonverbal cues in a conversation between either human and human or human and animal. Considered alongside the challenge of accepting rather than appropriating otherness, these lessons make interspecies communication an exercise in patience and attentiveness, self-reflection, and inclusion. An exercise that is about understanding animals *as* animals and as *others* who are different but not unknowable and who are not mute, even if they express themselves in foreign tongues. This might improve our relationships with animals and pave ways towards perceiving them as the sentient and articulate subjects who they are. Further, attuning our senses to the Other fosters empathy, or, in the words of ethologist Frans de Waal, 'if we feel one with the other, then improving their life automatically resonates within us' (2009: 116–117). In this sense, I hope, my study contributes to the practice of anthrozoology as a symbiotic ethics, having explored interspecies communication as a means to appreciate animal otherness and to form mutually beneficial relationships – in particular with farmed animals whose objectification and commodification can be linked to the Othering and silencing continually practised to keep these animal species marginalised, outside of our human moral circle. In contrast, the relational strategies I outlined in this paper encourage encounters with cows, pigs, and chickens as sentient individuals, fellow beings who interact and communicate in complex ways – if given the chance and freedom to do so.

Of course, approaching interspecies communication equipped with these strategies does not offer a 'one-size-fits-all' solution for improving human-animal relationships in general. The empirical data from my interviews supports the conclusion that practising interspecies dialogue informed by intercultural communication theory holds promise for interactions between humans and farmed animals and may also prove useful in the case of other domesticated animal species. Even if we speculatively extended this framework to wild mammal species phylogenetically closely related to humans – assuming that shared physical traits would make the interpretation of nonverbal signals easier – a large number of animal species would still be left out. Fishes, reptiles, insects, and others are just far more different from humans than cows, pigs, or even chickens. Thus, it is important to bear in mind that the strategies for interspecies communication explored in this paper aid us in forming relationships with some animal species more than with others. However, this should not keep us from responding to those more 'alien' presences with a similar degree of attentiveness, wondering how they experience the world and relate to each other and their environment. We can approach them with the kind of 'speculative wonder' that Laura Ogden and colleagues (2013: 5) encourage multispecies ethnographers to practise. This speculative curiosity, I believe, is a vital step towards engaging in communication across species boundaries – by acknowledging that animals do indeed speak and by trying to make sense of all that we, as humans, are able to perceive.

Cultivating this kind of attentiveness (van Dooren et al., 2016) is not too different from the relational skills effective intercultural communication requires. The leap from intercultural awareness to becoming more mindful of animal others is not that far, then. It requires no entirely new frameworks or theories, only some adaptation of those which already inform our encounters with cultural others. We can build on these similarities between intercultural and interspecies communication to raise people's awareness and educate them about ethical ways of relating to animals. This includes respecting animals in their individuality, as emphasised by the interviewees I spoke to, and minding individual as well as species differences in our interactions with them. Accordingly, I propose that further research into interspecies communication has the potential to change how humans perceive animals – from them being seen as 'voiceless others' to an appreciation of each individual animal as an autonomous, sentient subject behaving and interacting in meaningful ways.

Listening to animal voices thus brings with it the moral responsibility of responding to them, turning language from a boundary into a bridge between one animal species among Others.

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Urbanising pets or animaling the city: The status of semi-public animals in morethanhuman environments

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Nyman demands that 'space should be shared rather than dominated by humans'. To change urban spaces in the long-term, a change in symbolism and meaning is most important. To realise this objective, it will be necessary to both rethink the city's separation from the biophysical worlds as well as enter a dialogue including the dialectic of othering and connection with the animal side. As companion animals already share our life and architectural structures, they are predetermined to lead this change, bringing essential prerequisites to integrate them beyond their species boundaries. Dogs especially have the widest radius of activity as they can take part in human everyday life and therefore become a – like Pollack calls it – semi-public animal. This status enables them to demand multiple considerations in morethanhuman environments as well as to play an important role in redefining public spaces into a shared living environment no longer solely influenced by the no longer anthropocentric environment.

Keywords: human-animal studies; anthrozoology; multispecies cohabitation; multispecies urban management; companion animals

Introduction

A few years ago, I went out to dinner with friends. As soon as we had picked a table, my dog, Jamie, laid down at our feet staying quiet and unmoving until the end of the night. In fact, that particular night, he was so unobtrusive, that I almost forgot that I had brought him with me at all, an observation which I mentioned in passing just as we got ready to leave. One of my friends, who spends an immense amount of time and energy taking care of homeless dogs in their home, replied something along the lines of how 'a good dog is a dog not noticed'. At the time, I felt proud of my wonderful dog, integrating so well into this human-centred environment. In retrospect, this assessment seems to be quite naïve. By coincidence, I remembered that encounter again during my research and noticed the similarity to expectations about the good behaviour of children. 'Be still and be quiet' constituted guidelines for good behaviour for the longest time, concerning women and children alike

(Haring et al., 2019; Kelley, 2008; Powell et al., 2016). These are ideas that we would call outdated today and yet we find ourselves in the same situation once more when reflecting on our expectations for successful co-existence with otherthanhuman animals, henceforth referred to as animals.

This paper explores the issue of animals in urban environments with a focus on human-companion animal relationships. Starting with a short discussion of domestication and scientific explanations for the human tendency to establish cross-species bonds, the paper examines the research question if there is room for nonhuman animals in modern city life at all and how the idea of the post-human city as an urban environment that is home to a diversity of life forms can be understood and realised. As Braidotti argues, this will require an "anthropocentric shift away from the hierarchical relations that had privileged 'Man' […] and a radical repositioning on the part of the subject", in this case, a redefining of the city beyond the "boundaries of both anthropocentrism and of compensatory humanism" (2013: 88–89). With this in mind, the theoretical discussion will be supplemented by original qualitative data in the form of semi-structured interviews collected in Germany in order to include the subjective experiences of successful or unsuccessful multispecies coexistence in urban environments.

A shared history

Boundaries are created to ensure that what is seen as wild and uncontrollable stays out of human-created safety zones, protecting city life above all (Crowley et al., 2017; Gaynor, 1999; Philo, 1995). It is easily overlooked that the city has never been limited to human habitat and that animals appearing in the urban landscape follow a long tradition based on co-evolutionary processes. To understand the status of contemporary human-animal relations, we have to understand it as a consequence of millennia of shared life on Earth and an interwoven history of domestication. In opposition to past assumptions about domestication being a single, human-intended process, recent research describes it as a multistaged model. 'Animal domestication proceeded along a continuum from anthropophily to commensalism, to control in the wild, to control of captive animals, to extensive breeding, to intensive breeding, and finally to pets' (Larson and Fuller, 2014: 117). Certain animals simply followed the benefits of proximity to humans, becoming more and more synanthropic (Larson and Fuller, 2014) over time. Only far later in the axiomatic co-evolutionary process, in what Zeder (2012: 164) describes as the third pathway to domestication (the directed pathway), did humans start to actively domesticate animals by selecting them based on preferential traits. Interestingly, directed domestication often prefers those characteristics like tameness which nature, in contrast, tends to eliminate (Larson and Fuller, 2014: 128–129). The result is the emergence of tame animals and companion animals.

The directed domestication process, however, is still ongoing. Even so, recent evolutionary developments are rarely viewed in the same light. Taking dogs (*Canis lupus familiaris*) as an example, who according to Larson and Fuller (2014: 118) were the first animal to be domesticated, their relationship with humans continues to adapt to a new urban lifestyle. Where only a few decades ago many of them still took the roles of working animals in 'Western' countries – for instance, working on farms or guarding the house – their primary function in the city today is that of a companion (Haraway, 2003). They rarely sleep outside the house, and often in their human's bed (Carlisle-Frank et al., 2005). Furthermore, their

social radius changed to accompany their human counterparts in everyday life to city strolls and restaurants as well as sometimes to work. In some cases, they take on work themselves, functioning for example as all kinds of assistant dogs. At the same time, the domestication process is ongoing, maybe more detailed than ever. Modern genetics allows for extensive control of animal breeding and reproduction, creating purebreds designed to satisfy human preferences on the one hand, Armbruster (2010: 758) argues, while at the same time neutering or even euthanising unwanted individuals with a less desirable family tree. Leaving open the question about moral reasoning like overpopulation aside, this leaves us with a directly domesticating human interference in the form of genetic isolation and breeding. Neutering or spaying is an openly accepted way to domesticate companion animals even further by removing their sexuality, therefore sometimes changing behaviour and altering them to fit the human's lifestyle (Armbruster, 2010: 759).

The private animal

Entry into discussion about the place of animals in human society nowadays, should not ignore the shared history and historic interdependence of humans and animals. Companion animals represent the last stage of this development with a less obvious and comprehensible interrelation. While keeping farmed animals serves clear purposes, theoretical explanations for the need for animal companions have not yet been sufficiently discussed. Explanations of human-animal bonding include Schutz and Maslow's 'need theories' (Maslow, 1943; Schutz 1996; Trujillo, 2013: 117), animals serving as resources for communication, and social addressees (Muster, 2013: 165–169), self-psychology (Brown, 2004) or neurobiological approaches based on the social response system like 'Human-Animal Relational Theory' (HART) (Chandler, 2018). Dogs are one of the most common species involved in a meaningful interspecies relationship, partly explained by the simple fact of their life expectancy in good living conditions of approximately 10 to 15 years, which according to Tüpfer and Beeger-Naroska (2013: 195–196) allows upholding the interspecies bond for a relatively long time. Once formed, the bond changes the relationship itself as well as the way the animal is perceived by the human. Following Erikson's study about human-animal relationships in the Amazon region, named animals gain the ability to transcend their own species (2005: 9), a development that can be transferred partly into public spaces, as will be seen in the following pages.

When looking at the relationship of human-companion animal, in some communities, a gender-based difference in treatment and expectations of the animals can be observed. Tüpfer and Beeger-Naroska (2013) describe that starting with the decision on species selection, studies show that men may more often prefer dogs, while women welcome dogs and cats alike; a result that the study explains by considering the commonly ascribed characteristics of both species with dogs often described as empathic, loyal, and strong and cats as more independent (Tüpfer and Beeger-Naroska, 2013: 214). While men often prefer a 'buddy', as Trujillo (2013: 121) describes it, women enjoy the nurturing aspect of the relationship (Tüpfer and Beeger-Naroska, 2013: 195). Nonetheless, while such differences can be observed, it has to be noted that in many cases of differences in species preference within-sex variation surpasses between-sex variation (Herzog, 2007: 8).

This describes a difference that does not directly influence the depth of the relationship, however. In many cases, companion animals gain the status of valued family

members. When I was collecting qualitative data on this matter and interviewing people about their relationships with their dogs during my research in Erlangen, Germany in 2017–2020, they would often describe their dogs as 'family members' and show a strong empathy with and concern for the wellbeing of the dog. 'If he isn't feeling well, I am not feeling well', one of the interviewees explains and later clarifies, 'for me, emotionally there is no difference, they feel things like us and they notice things like us, so I wouldn't say that there are different levels.'

Another interviewee in the study, calls herself the animal's 'grandma' and pictures her dog as an independent family member, who can behave quite stubbornly, a trait she seems to cherish:

> If he doesn't want to do something, then he will just go into his bed in the bedroom and stay there for the rest of the day … or if we go on a walk in the evening and we don't go the way he wants to he will just stop … grandma can carry him after all, so yes, he is very sweet and uncomplicated.

The different participants also judge their relationship with individual dogs based on their own expectations or experiences. A young woman in her twenties who lives with two dogs clearly distinguishes between both individuals and elaborates as follows about her relationship with the dog who only later joined the household:

> Well, I believe as a team we are not the best somehow, so in comparison to my other dog [dog who first joined the household] … she [the dog who later joined the household] doesn't necessarily need me, but it's alright. So, yes, it is ok, but not perfect let's say like the relationship with the other dog [first dog in the household].

In private spaces, dogs are recognised as loving members of the family and individual beings with different needs and characteristics. Most interviewees describe trying to include their dog in family life, to fulfil their companion's unique needs as well as possible, and be considerate of possible challenges. A middle-aged couple admits, 'He has to accompany us everywhere and decisions are always taken in his favour.'

A study on women who have suffered domestic abuse and their relationships with their companion animals shows that many women stay longer in abusive relationships for fear of what would happen to the animal as they could not bring them to safe houses, showing how deep multispecies bonds go (Ascione, 1997).

The public animal

If we are looking at cities as multispecies places, companion animals are not the only representatives of the animal world. Urban life as opposition to nature is still originally located in nature itself and as such is by design home to more than the human animal (Harvey, 1996; Kaika, 2012). As such, we encounter different species and different levels of human acceptance of them. There are those kept inside, mostly apart and limited in interacting with

wider society, and those primarily located outside, creating their own living spaces alongside or within urban architecture (e.g., birds, rodents, insects, reptiles, fish). While some of these are the same species as their indoor counterparts, if focus is placed on 'Western countries', dogs stand out the most, partly due to their size and likelihood of directly interacting with the people around them. It is in this context, Holmberg argues, that species like dogs, whose individual members had been previously described as family members, change status, and become 'anomalies in need of correction' (2015: 48) and therefore a question of urban animal management. The human categorisation of the animal changes perceptions of them by humans and brings with it not just personal preferences for certain animals but even legal requirements (e.g. different regulations for companion animals or wildlife) for handling the individual member of the species. Going beyond categorisations by optics like 'ugly' or 'cute', 'clean' or 'dirty', 'female' or 'male' (Adams, 2013: 22), in human-dominated spaces, unowned dogs are classified as 'the lost, the homeless and the feral' (Holmberg, 2015: 53). As a consequence, their meaning but also their rights change with the categorisation. Donaldson and Kymlicka (2013) propose that domesticated animals gain the status of citizens in shared human-animal communities, while wild animals who live in urban spaces are regarded as denizens. Under protective laws for companion animals, the homeless and the feral are described by Haraway as 'non-citizens' (2008: 10) with few ambassadors and an uncertain future often closely tied to their city's urban planning and animal control strategies.

The circumstantial categorisation of one species, for example, stray dog, often goes along with the overpopulation of animals in urban areas and is considered a matter of public health, space, housing, and finances (Holmberg, 2015: 53). While the problem is primarily approached from a position of the city as a human-controlled environment, it has also to be acknowledged that overcrowding risks the ability to provide acceptable living circumstances for its animal inhabitants. Companion species are inherently dependent on human interaction and less equipped to survive the hunt for food in modern urban spaces, and even those labelled as 'feral' often rely on additionally provided food or care. As a result, upholding the human-animal balance in contemporary cities is a pragmatic as well as ethical challenge.

The semi-public animal

Having discussed urban spaces both as a home for companion animals living behind the closed curtains of their humans' home as well as their wilder counterparts, there are times when these categories blend. This issue mostly concerns dogs, who can inhabit a large operating radius far beyond the limitations of their home. Looking at the life of companion animals in 'Western' cities or villages, where for example cats pursue freedom on their own taking on the identity of public animals for a chosen time, dogs act under different regulations. Instone and Sweeney state that not the animal itself leaves the home but the human and the dog by extension therefore the dog is dependent on the human for sanctioned access to public space (2014: 776). As an inseparable unity – sometimes even physically due to the connection of the leash – the relationship itself leaves the private space and recreates the dog as a 'semi-public animal' (Pollack, 2007: 98). Stepping into public areas with companion animals puts the characteristic of 'domestication as a spatial process' (Holmberg, 2015: 23) in a new light and opens up the question of when, where, and how to include or exclude animals as citizens. While in the past, for example in Germany, dogs would be expected to stay behind to guard the house in the absence of humans, in contemporary "western" society dogs are much more integrated into wider society. On one hand, they share their guardian's everyday life, maybe

even accompanying them to the office, on the other, they engage in a variety of socially recognised jobs themselves. Therefore, leashes and muzzles become even more important enabling dog walking people to expand the control of closed rooms creating a kind of extended private space around the human. The close connection via leash between human and dog creates a shared body with chimeric characteristics. The movement of one party cannot be ignored and inevitably influences the other, creating humans and dogs as connected entities (Instone and Sweeney, 2014: 776). The main task of leashes and muzzles, however, concerns the retaining of control of the animal and the spaces she can enter, highlighting that animals have to abide by the rules of urban life to be allowed to be a part of it. This stems from the underlying discussion about de-civilising human spaces by sharing them with animal cohabitants.

Regarding dogs, Holmberg articulates four main concerns following from this fear of de-civilisation: the matter of safety/risk, disturbance, excrements, and 'dogginess' (2015: 35–39). While dogs as domesticated animals are accepted in private spaces, their place outside is a process of continuous negotiation. This concerns the creation of particular spaces for dogs, like dog parks and beaches, or the regulations under which dogs are allowed to move in those and other spaces. Leash laws, size regulation, picking up excrement are all reactions to reduce the negative impact on urban spaces and their inhabitants (Gomez and Malega, 2020; Graham and Glover 2014; Urbanik and Morgan, 2013). Urban animal management can be characterised as very structured following a strict exertion of control. This wish for control, however, is not only enforced on dogs and their responsible caretakers from outside. Participants in the study express different opinions about the regulations but many feel them to be quite necessary. In particular, leash etiquette becomes an important point, which focuses not only on the control of the dogs but seems to describe the extended private space and the protection of it.

One participant who lived with a large dog breed, a Kangal Shepherd, was often quite conscious of how his dog was perceived as a possible threat and responded to the question of when to let his dog off-leash as follows:

> It depends where I am. So, let's say there are a lot of people, probably not or if there are children. Because the danger is there, that he is just going to run one over. Without intent, but that's enough that something could happen.

Another argument is the urban space itself and the dangers it holds for the dogs as described by a young girl living in the city.

> It is just too dangerous with all those urban trains and buses, everything is hectic. A leash also means safety for the dog and I am not totally against leashes. It depends on the situation.

Discussing the same issue, two other interviewees expressed frustration that the leash is often not respected by others walking their dogs, who approach them even if it is obvious that they do not want any contact. A young girl in the company of a Pinscher-mix stated confidently that:

> If the dog is on-leash, he is on-leash, there is no playing, there is no running to other dogs but rather he is on-leash and has to behave. I am very strict and if other people think they have to let their dog run over, I certainly object.

The leash seems to work as a sort of sign language between one dog walker and another, which some abide by, and some ignore. This is confirmed by another female participant with a very friendly Border Collie:

> Some people just don't want to accept it; it goes so far that I started using white lies when people annoy me. I tell them that he had surgery, that's it. Because some people just ignore that I don't want my dog to have contact on-leash in that moment.

Whereas leash laws serve to minimise risks for the general population, they also represent a feeling of security that people walking their dog wish would go both ways. By using the leash to limit the impact on public space, a boundary is created, however, it only keeps one side from interacting. Other dogs and their humans, people walking by, or often children still can choose to interact with the leashed dog. Invasions of this privacy are felt by both human and animal alike. Trujillo points out that the borders between the individuals become blurred, which can lead to the dogs becoming part of human identity and as a consequence change the way the human-dog-entity is perceived by others (2013: 116). A cute dog can make the human seem more approachable; a larger breed may be selected to toughen up one's image. The argument is also supported by Adams' view on companion animals being used 'to speak for humans to humans' and 'mediate […] human evaluations of humans' (2013: 21). As such, the semi-public animal fulfils additional purposes by generating meaning around the accompanying person, if intended or not.

Wildness in urban life

Humans and animals share not only a past but also a present, going as far as presenting themselves as one body life in the city is heavily influenced by the binary image of nature and culture. Whilst this idea is challenged more and more, we still struggle to give up what Franklin calls 'the notion of cities as humanist citadels successfully designed against "nature", and constituting a purified world of humans amongst themselves' (2017: 202). At the same time, Houston et al. argue that 'hyper-separation' (2018: 195) can no longer be seen as the solution, for it is not the city that is changing, but merely the perception of it. Looking at the shared history, urban space as purely human is a myth that is overturned by the increasing attentiveness to 'the many animals that reside in our cities – some newly arrived, others pre-dating the city itself' (van Dooren and Rose, 2012: 1). Despite humanity's best efforts, wildness, Armbruster points out, is 'a force that has often been constructed as nature in the extreme, hovering far outside the boundaries of human culture' (2010: 763), which remains in the city and transcends these artificially created, if not imagined, boundaries. The conflict over space is unavoidable in the process of urbanisation (Holmberg, 2015: 2) but looking at the situation of 'what is', it is not a reality of separation from nature but a myth that is fought over.

In learning to live with and accept nonhuman animals in urban spaces, Armbruster determines 'our lack for tolerance for wildness, our drive to control it, is at the heart of our troubled relationship with the natural world' (2010: 763). As wildness is everywhere, the relationships we enter with companion animals offer a way to bring humans closer to the idea of the morethanhuman and a co-produced environment. Because of their obvious domesticated characteristics, they represent the bridge between nature and culture and the first step to accepting wildness into the city. Besides often unnoticed or wilfully ignored wildlife in the city, companion species often provide 'the only encounter that many people have with nonhuman animals' (van Dooren and Rose, 2012: 17).

Returning to the questioning of the 'boundedness' of the city and continuing with the idea of unbinding the city, the 'more-than-material dimensions of "place"' (van Dooren and Rose, 2012: 2) have to be emphasised. The city embodies not only a specific, material place but also a symbolic place. As stated by Franklin, whereas the first is associated with the reality of being and the potential of becoming home to wildlife (2017: 208), Thomson confirms that the second is essentially antagonistic to the idea of the wild (2007: 80) and represents hyper-separation. It is, however, the symbolism, which has to be adapted to bring about a change in meaning connected to urban spaces. Humans have to accept urban space not as 'civilization's struggle against wildness' (Thomson, 2007: 83) but as a hybrid space containing both humans and nonhumans (Nyman, 2015: 77). In some cases, companion animals share the same struggle as wildlife in the city. For example, semi-public animals are taking part in everyday urban life on many levels, while still often being perceived as a stranger or an 'Other'. While it is common to see humans walking dogs in the city, they are accepted only if they are not perceived as a disturbance to the human city life. Individual animal caretakers may be influenced by the change of space, treating their companion differently at home than in a public environment and transferring social inhibitions and expected behaviour onto their chimeric companions. While dogs may sleep in the bed, society's expectations towards the four-legged neighbours are quite clear. Animals should not be disruptive and should disappear into the background of spaces occupied by humans. Their participation in society may be tolerated, but it is the responsibility of the accompanying human to avoid any possible conflicts. One side effect is the continuous demand and increase in dog training schools that came to light during my research. When confronted with the question of why people visit their school, one dog trainer employed there explained, 'to make everyday life in the city easier, to be able to handle the dog easier, so that he is suitable for urban life', while another trainer followed this up by sharing that people join the training:

> for the dog, yes, but actually for their idea of the dog, mostly for the neighbourhood and for taking the dog on a walk, because people have to think you have your dog under control because that is so important.

She elaborates further that dogs have to welcome touch by anyone as well as follow commands, otherwise, their guardians and strangers may think them to be 'bad dogs'. She summarised, 'That is the picture people have, it has to be an educated dog, which follows orders and just functions.'

Altogether, the responsibility of fitting in and adjusting is clearly placed on the animal. The requirements for being accepted as a citizen into human space, include being as

nondisruptive as possible, being approachable, and in some cases, even accepting unpleasant human interaction without complaint.

The idea of the controlled city space influences the social behaviour of all its inhabitants in one way or another. While some wildlife is controlled through material boundaries like fences, the wildlife surrounding our homes becomes almost unrecognisable by the extent of control exercised upon it. The social rules of human cohabitation are extended to the interspecies neighbourhood. As mentioned before, tamed animals can transcend their species, however, this brings with it the demand to subject nonhumans to human rules as well. Other animal ethics ask us not to only consider the animal as a being worthy of moral consideration based on similarities but 'to address animals in their difference and to understand that despite their different appearance we are all parts of "being" itself' (Aaltola, 2014: 195). It is therefore important to not just assimilate animals into urban life but also respectfully integrate them according to their inherent nature. One way to approach this would be to take a less adverse stance towards animals in human space as well as try to understand them as a part of and not an opposite to the living space. Encouraging interactions between children and animals from an early age and including animals as a more prominent topic in the education system could be valuable first steps. During the creation of the image of the symbolic city as a space free of disrupting natural influences, all intrinsic value or meaning of nature has been lost (Stuart and Gunderson, 2019: 9). It is that intrinsic value that we have to rediscover to create a shared environment for coexistence based on 'more-than-human relationships of responsibility and care' (Houston et al., 2018: 194).

Many different meanings and values have been ascribed to companion animals focusing on the species transcending aspect. They can move, assist, delight, and encourage us, qualities made possible by a history of domestication and adaptation to human life and human needs. Yet, these qualifications and the 'more' these companions bring to our lives stems not from their learned similarity but from their 'otherness' itself. The most valued characteristics in dogs are their attributed loyalty and unconditional love (Otterstedt and Rosenberger, 2009: 184). On one hand, the experience of companionship and absence of social judgement can be experienced as extremely comforting to humans, grant emotional support, and even allows the animals to step in to substitute roles, such as therapist. On the other hand, even the most reliable companion animals never remain fully controllable and continue to be unpredictable. Armbruster highlights animals as a reminder of our own human double nature and the animality within, which we suppress in everyday life (2010: 769). Watching the animal act in urban spaces draws attention to an instinctual approach and integration in a given environment unaffected by imagined boundaries. It is, therefore, through the animal we can experience an 'otherwise invisible environment' (Nyman, 2015: 66) and rediscover our own animality.

The post-human city

How then can a post-human urban environment be created which allows for agreeable cross-species cohabitation? I argue that what has already been done in the private space – making room — has to be transferred to the public. Urban planning has to find the delicate balance between control and nurturing nature, discarding and reinventing boundaries for the wellbeing of a city's multispecies inhabitants. To realise this endeavour, public spaces have to be designed in a way that allows for closeness as well as distance, focusing not only on a

human-centred perspective but listening to the animal voice as well. ‘Space’, as Nyman writes, ‘should be shared rather than dominated by humans’ (2015: 66). To change urban spaces in the long-term, a change in symbolism and meaning is most important. Following Houston et. al. first steps should be the rethinking of the city’s separation from the biophysical worlds (2018: 191) and according to Milstein entering a dialogue that includes the dialectic of othering and connection (2013: 172) with the animal side.

As companion animals already share our life and architectural structures, they are predetermined to become ambassadors for this change, bringing essential prerequisites to integrate them beyond their species boundaries while still leaving room for their otherness. As a further step, to enable this process, ‘where animals are dominated through social-structural forces, one must also study the “animals in our heads”’ (Stuart and Gunderson, 2019: 3). We use animals as channels to communicate about ourselves and others, and our relationships with nature. If we are looking at zoos, we can easily see how animal space influences and is used to influence the human perception of animals. The architectural change from cage bars to glass fronts for example, which Milstein describes in her study of zoos, at the same time, hides and enforces the divide by extending the martial fence to sensory deprivation, detaining odours or sicknesses (2013: 177). The divide is invisible, attention to it unwanted, creating an ‘otherness’ and deconstructing it at the same time. Instone and Sweeney describe dog and cat cafes, dog parks, and other trends (2014: 774) which are supporting a similar development; allowing room for the Other in a very detailed, prescribed way that follows an anthropomorphic assimilation of wildlife into space.

The hyper-separation continues expanding itself only to accept individual representations of ‘the wild’ by adhering to expectations of behaviour and essentially forsaking the wild. To further encourage successful coexistence, we should concentrate instead on 'withness' as Despret demands, ‘where species domesticate each other, and create new articulations of both speaking and being’ (2004: 31). It is the mark of domestication through the ‘model of responsibility’ (Holmberg, 2015: 25), that allows semi-public animals and their guardians to enter spaces if they govern their behaviour. At the same time, by accepting otherness, encounters with wildness should ‘challenge us, mark us and change us, sometimes in flesh’ (Armbruster, 2010: 770). In this process, the responsibility we assumed cannot simply be ignored as animals have become dependent (Armbruster, 2010: 759) and we return again to the necessity of a dialogue. When designing public spaces, there should be room for a new urban symbolism of thinking with wildlife in space (Thomson, 2007: 80) reachable as suggested by Nyman through ‘negotiat[ing] between human and animal spaces, and breach[ing] conventional boundaries’ (2015: 68). Building onto Butler’s theory of performed identity (1988: 520), Instone and Sweeney’s concept of ‘animaling’ the city understands this idea of cohabitation as a doing and a spatially influenced process in which chimeric bodies are performed in particular times and places (2014: 782).

Multispecies cities present a challenge and are characterised as disruptive (Houston et al., 2018: 194). Despite this, reclaiming space and communicating differently about animals informs and can shape the way of thinking and experiencing animals as pointed out by Milstein (2013: 163). Human–animal relationships are always in the becoming (Schuurman and Franklin, 2015: 40), and therefore urban space has to leave room for the fluidity of this relation and changing meaning as spaces of everyday human–animal encounters become more and more significant. While the post-human city will continue to include boundaries and divides, this otherness does not have to be hidden or kept secret but may be embraced

as an opportunity and challenge to revisit our own identity and relieve us from the burden of clinically separating what is and what is meant to be.

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Individual narratives in elephant encounter tourism: Investigating the role of responsibility and saviourism in tourist decision-making

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Myanmar features one of few remaining old-growth teak forests, owing largely to the selective harvesting labour of Asian elephants. Industry decline has prompted the implementation of logging bans, capping of annual revenue targets, and reduction of subcontracts, leaving numerous working elephants suddenly unemployed. After years of physical labour, many require ongoing veterinary care for industry-related injuries and sources of enrichment to prevent a decline in physical and psychological health. Elephant encounter tourism facilities offer support for elephant 'retirees' while economically assisting human owners and trainers. This paper considers how, by providing visitors the opportunity to form connections with individual elephant persons directly and through storytelling, these facilities reinforce a sense of responsibility and can impact the choices tourists make. Conclusions are informed by an analysis of affective language use in visitor reviews of the four top-reviewed elephant camps in Myanmar and the author's experience volunteering at one such site.

Keywords: elephant, ecotourism, forestry, labour, saviourism

Introduction

In November 2019 I travelled with a team of veterinarians and volunteers to work at an Asian elephant (*Elephas Maximus*) retirement camp in Shan State, Myanmar. We supported the camp by introducing new enrichment structures, planning long-term veterinary care protocols, and testing pain management strategies for the elephants' injuries. During my nine days at the camp, aiding the mobile veterinary unit and instructing an art project at their nearby school, I learned about the founders' philosophy and strategy for the management of injured and retired lumber elephants. Their facility combines a sanctuary-like roaming environment with an elephant encounter tourist attraction and an on-site veterinary clinic.

To ensure elephant wellbeing there are no prepared performances or rides at their establishment, explicitly indicated on their website as well as on prominent signage at the camp entrance. Additionally, they maintain an elephant herd of only eight individuals,[1] (seven female retirees and one adolescent male orphan), to ensure all residents have their space, avoid conflict, and guarantee that camp resources are never outpaced by its needs.

The camp offers the opportunity to feed and bathe the elephants and demonstrates creating paper from 'ele-poo'. Guests enjoy a meal of locally grown traditional foods and undergo educational programming designed for both locals and tourists with a focus on the history and value of elephants to Myanmar's people. Revenue acquired through tourism funds the resident elephants' medical care and supplemental diet, salaries and benefits for the camp staff, and the operation of a mobile veterinary unit offering free services to elephants in private ownership. This type of facility represents a domestic solution to address many issues affecting both elephants and humans in the country as a result of the declining timber industry. Camps utilise the elephants, their behaviours, and their stories for economic gain in the name of conservation (Kontogeorgopoulos, 2009a: 430; Taylor, 2018: 17).

Presenting the elephants' life histories to tourists, made more powerful by the presence of the living being in front of them, offers an interpersonal moment of connection with a species ambassador (Bear, 2011; Hinks et al., 2017), representing Asian elephants, and specifically those born or captured into the timber industry. Considering my own experience working in this context, alongside an analysis of visitor reviews written on the public TripAdvisor website, I suggest that the nature of this encounter can produce the motivation to engage in more ecocentric forms of tourism, as well as a feeling of responsibility to guide the behaviour of other tourists towards more ecocentric practices and consequently better welfare for the elephants.

History and decline of the lumber industry

Elephant labour in the lumber industry

Myanmar boasts one of the last remaining old-growth teak forests, owing in part to the use of elephants to selectively harvest the lumber rather than clearcutting forested areas (Begley,

[1] Two of the elderly matriarchs passed away in early 2021 of old age, after the completion of fieldwork in 2019.

2006; Bryant, 1997). Asian elephants in Myanmar have been used as labourers in lumber harvesting operations since the early 19th century (Bryant, 1997: 22–23). Elephant labour includes traversing difficult terrain, hauling logs via roads or water courses, and clearing log jams – called '*yelaiking*' – during the rainy season when rivers are used to transport logs downstream to weigh stations (Begley, 2006: 13, 15–16). The use of elephants by the Myanma Timber Enterprise (MTE) improves access to areas not easily traversed by humans on foot or in various machinery and reduces the impact of lumber harvesting on immature trees, ultimately protecting the valuable environmental resource and sustaining the industry.

Elephants are obtained for physical labour either through wild capture or captive breeding programs. Capture is followed by punitive and torturous methods of 'spirit-breaking' that include physical harms such as burning or stabbing with an ankus,[2] isolation from conspecifics, and deprivation of food and sleep (Taylor, 2018: 5). Government figures estimate 5–30% (Jackson et al., 2019: 3; Lahdenperä et al., 2018; 2019) of wild caught elephants die during this process, though some studies have shown the 12–20% range to be more accurate (Begley, 2006: 9; Lair 1997: 7). While there are documented methods to corral and immobilise wild elephants in less acutely violent ways, Lahdenperä et al. found little impact of method choice on the recorded mortality rate during and after the capture event (2018: 4–5, 7–8). Captive breeding programs, on the other hand, have proven ineffective at maintaining the elephant workforce due to the impact of wild capture, taming, and physical labour on the mothers' reproductive success (Lahdenperä et al., 2019; Lair, 1997).

In response to the 1994 ban on wild capture, interventions targeting both human and elephant behaviour (Lair, 1997) have been proposed to improve the low birth rate and high juvenile mortality rate of 23.5% (Crawley et al., 2020: 1; Lahdenperä et al., 2019: 6). Efforts to maintain a consistent and healthy workforce for the timber industry continue to this day, with leading research teams such as the Myanmar Timber Elephant Project working to:

> provide new solutions to elephant management and healthcare in order to optimise the balance between working ability, survival and fertility, and to minimise calf deaths. This will lead to a self-sustaining working population, which will avoid the need to

[2] The mahout's metal hook (Kontogeorgopoulos, 2009: 443), used to hit the elephant in the forehead while riding or hung over the ear to offer control via the tug of a rope.

bolster the captive population with elephants captured from the endangered wild population (2022: What We Do).

While their work is valuable in protecting *wild* elephant populations and improving the lives of those working in captivity, the organisation remains committed to the perpetuation of an industry reliant on the physical labour of elephant workers.

The elephants' productivity and longevity, thus their economic value to the owners and MTE, is predicated on their fitness for work. To minimise financial losses, there are comprehensive written regulations surrounding the elephants' work-lives, and ongoing veterinary care with individual medical records kept in logbooks associated with their MTE registration number[3] (Begley, 2006: 13; Lahdenperä et al., 2018: 7; Lair, 1997: 4–5). Age-related activity management is a key component of handling regulations. Training begins after age five based on a presumed physiological decrease in maternal dependence. Weaning is usually complete by age three and the juvenile rapid growth period slows at about age five (SDZWA Library 2021: Reproduction & Development), though this neglects the possible psychological impacts of separation.

Behavioural observations demonstrate the sociality of elephant individuals and the cultural complexity of their interspecific interactions (Douglas-Hamilton et al., 2006; Locke, 2013: 79–80). Elephants live in matriarchal herds consisting of up to three generations of maternal elders, with male offspring leaving to form bachelor groups around age 15 (SDZWA Library 2021: Behavior & Ecology). Separation ten years earlier than normal for wild herds risks affecting the development of socialisation skills and the offspring's ability to form bonds with conspecifics, potentially lowering reproductive success and survivability (Bradshaw et al., 2005; Kontogeorgopoulos, 2009a: 430; Lahdenperä et al., 2016). Additionally, researchers have observed notably high rates of stress-induced behaviours in young wild-caught or orphaned elephants (Kurt and Garai, 2001: 59), demonstrating that separation from the mother for the purposes of training and work could indeed be a major stressor for the child.

[3] Registration numbers are branded on the elephant's body. I chose not to include an image as it would compromise the identity and medical records of the subject.

From age 5 to 17 lighter physical labour duties are performed, after which the elephants begin traversing more difficult territory and transporting heavier loads (Lair, 1997). Elephant shifts are specified as 5–8 hours long with a two-day rest every 3–5 working days, and an annual 'vacation' beginning 15 February for three months. All workers receive time off for illness, have a mandatory retirement age of 55, and a total annual extraction limit of 400 tonnes, while mothers are not to be worked from mid-pregnancy until one year after delivery and are allowed on-demand nursing until natural weaning (Begley, 2006: 13; Lahdenperä et al., 2018: 8; Lair, 1997). Despite these written orders, Begley observed a logging operation in March 2006 and was advised by interlocutors that several others were active in the vicinity at that time (2006: 15). While this was not mentioned during my November 2019 visit, I was informed that many owners place their elephants in temporary roles in tourism facilities or ceremonial processions for extra income during these shutdown months. Begley was also told that the 'mandatory' retirement age of 55 was frequently ignored, with the elephants often worked until disability or death leaves them unable to continue (2006: 15).

Mahout / oozie relationships

In addition to regulations surrounding the elephants' labour, there are stipulations about the requirements of their human co-workers, oozies. Also known as mahouts,[4] oozies are trainers and handlers who work closely with their elephant partners, monitoring for signs of ill health, helping the elephants acquire food, and ensuring that untrained humans interact with them safely. Since the length of an elephant's life is roughly equivalent to that of a human's, they would ideally be paired with a young apprentice oozie who could mature alongside them, allowing the development of close interspecies bonds (Crawley et al., 2019; Eltringham, 1982, cited in Hart, 1994: 299; Kontogeorgopoulos, 2009a). These partnerships offer opportunities to amass important knowledge about the care of captive elephants (Crawley et al., 2019: 2, Hart, 1994: 303). The systems of knowledge production[5] at work in this context have since been explored and documented via 'Western' methodologies to inform various strategies for

[4] Oozie will be used in this paper as it is the regionally appropriate term.
[5] Systems of knowledge production have value without requiring confirmation or validation by 'Western' methodologies (Chilisa, 2020: 92–93), though it is worth noting the inclusion of oozie indigenous knowledge to the 'Western' understanding regarding the care and management of Asian elephants.

improving elephant wellbeing, including elephant self-medication (Lainé, 2018: 283) and nutrient supplementation through dietary choices (Campos-Arceiz et al., 2008).

In accordance with this longstanding practice of elephant husbandry, industry protocols require oozies to be partnered with individual elephants, yet the working ratio on lumber processing sites during Begley's fieldwork was six elephants per single oozie (2006: 16). He attributes this to increasing difficulty in recruiting oozies into isolated jungle life, the low morale of his interlocutors, and a reported wage equivalent to just $10 USD (~£7)[6] per month (Begley, 2006: 16). Crawley et al. noted the reduction in oozie hiring and retention is due to the decline of the lumber industry and increased access to technology and transportation (2019: 9). Young men have more varied employment opportunities than in the past (Hart, 1994: 303), shifting the profession away from its traditional reliance on the passing of information and skills down family lines, and towards the need for formal training. Today, low recruitment rates mean more oozies enter the workforce without an apprenticeship period and spend less time on the job, with turnover in some cases being recorded annually (Crawley et al., 2019: 6).

Working timber elephant wellbeing

In the lumber industry and beyond, elephants are regularly subjected to ongoing labour without rest or retirement, highlighting profitability as the underlying motivation behind the written regulatory standards. Elephant work-life regulations are subject to manipulation and non-compliance just like human labour conditions, where enforcement is affected by an organisation's size (Almeida and Carneiro, 2009), the frequency and thoroughness of inspections, a lack of penalty implementation, and ineffective workers' rights awareness campaigns (Kanbur and Ronconi-, 2018: 333–337). The latter proves especially difficult across species lines as clear communication with workers about employment rights and infringements is nearly impossible, prohibiting elephant labourers from advocating for themselves as workers in a legal sense.

Despite the lack of regulatory enforcement, subpar oozie management, and continuous exploitation previously noted, human self-interest in preserving the timber

[6] Original source uses USD. Approximate current conversion rates for GBP via Google.

industry workforce has shown some positive impact on the welfare of the elephants. Regulated conditions are being maintained to enough of an extent that they have ensured adequate physical health for the elephants owned and employed by the MTE. Dr. Susan Mikota, co-founder and Director of Veterinary Programs & Research at Elephant Care International has noted:

> The M.T.E. elephants that I've seen are really healthy compared with elephants I've seen in other countries, […t]hey are on a natural diet, they are allowed to forage. They have good muscular skeletal body condition. They get good exercise (Fuller, 2016).

Figure 1 shows the visible body condition assessment scale used for Asian elephants; a diagnostic tool utilised to evaluate a key metric of their physical health.[7]

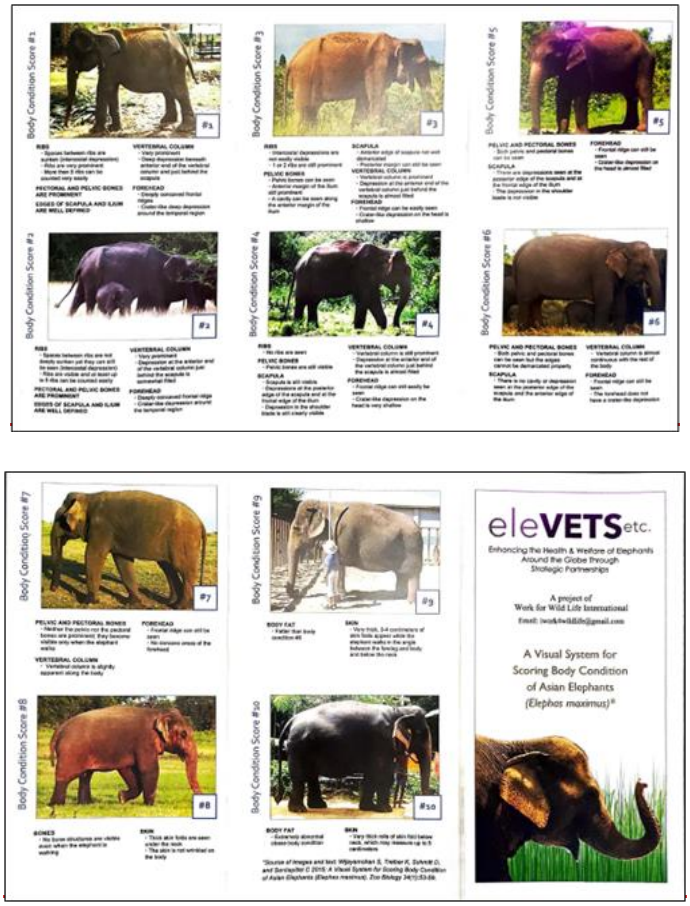

***Figure 1**:* Body condition scoring (BCS) index for Asian elephants used by author under guidance of Dr Susan Mikota during November 2019 visit.[8]

[7] Note that obtaining actual bodyweight data is rather difficult with such large creatures.
[8] An earlier version of this BCS index was referenced by Harris et al. (2008: 5).

Fuller (2016) also spoke with elephant behaviour specialist Dr Joshua Plotnik, who commented that working elephants regularly achieve a lifespan of 50 to 60 years as a result of their activity levels, access to proper nutrition, and regular veterinary care. A 2008 study comparing survivorship corroborates this, showing that MTE elephants have double the median lifespan (41.7 years) than that of Asian elephants in zoos (18.9 years) (Clubb et al., 2008).

Good physical health is a relevant marker of welfare, though not sufficient to classify work as safe, healthy, or humane. The recognition of any living being as a unique individual physically, socially, and relationally is required for considering overall wellbeing (Harris et al., 2008), especially in a work context (Coulter, 2017a: 37–38). Any human-led assertions on elephant job satisfaction or feelings of dignity and respect (Coulter, 2017b: 174) are little more than egomorphism[9] which, while a valuable tool for considering the welfare of otherthanhuman[10] animals, is not a replacement for the perspective of the affected individual.

While elephants can communicate unhappiness or discomfort, they rely on body language[11] and vocalisations[12] to do so (Wemelsfelder, 2007: 27–28). Understanding an animal's communication requires knowledge of the species and the individual, set in the specific context in which observations are recorded (Wemelsfelder, 2007: 28, 30). Inclusion of various areas of expertise, including local handlers, is vital to a holistic understanding of elephant wellbeing (Harris et al., 2008; Locke, 2013),[13] a process made difficult with the increasing ratio of elephant to oozie. Less time spent in the job and in specific partnerships hinders the continued production of knowledge, impacting oozies' ability to understand elephant behaviour (Crawley et al., 2019: 8–9) and develop interspecies relationships based

[9] In contrast to 'anthropomorphism' where we are applying the category human to animals as a distancing device, 'egomorphism' applies the personal experience and thus closes the gap of understanding (Milton, 2005: 265–266).
[10] Henceforth animals as per standards of anthrozoological writing.
[11] 'Body language' as defined by considering the whole animal in their context and psychological state rather than simply through an isolated behavioural observation (Wemelsfelder, 2007: 28, 30).
[12] Otherthanhuman verbal communication.
[13] One study on captive Myanmar timber elephants seeks to refute this, though the methodological parameters severely limit the generalisability. The study used only three observers, who were undergraduate biology students with some animal behaviour understanding. The participants underwent targeted training in this specific ethogram, were afforded a round of practice coding, and received feedback on their performance relative to the lead author's observations (Webb et al., 2020: 4). The students were tasked with coding behavioural observations in short (~20s) clips of semi-captive elephants directed in an object pickup task, thereby considering only behavioural responses to a specific context and neglecting the whole animal (Wemelsfelder, 2007: 28). Further independent coding demonstrated a high percentage of agreement between observers on observed behaviours. The author suggests this can be generalised to 'non-specific observers' (Webb et al., 2020).

on mutual trust, a process Srinivasaiah et al. suggest can take eight years (2014, cited in Crawley et al., 2019: 9).

Consequences of elephant layoffs

Perhaps most indicative of the inhumane nature of lumber industry employment, is the absence of respect and support for the elephants after employment ends (Coulter, 2017a: 37). Industrialisation practices cutting deeper into the forest and compromising young growth contributed greatly to the decline of viable teak and the acceleration of deforestation (Begley, 2006: 13–14). Between 1990 and 2014 Myanmar lost 6.3 million hectares of forest, approximately 20% of its total forested area (Environmental Investigation Agency, 2019: 5). This alongside the degradation of remaining forests prompted the implementation of conservation schemes to preserve the teak export industry on which Myanmar heavily relies (Environmental Investigation Agency, 2019: 9). The government phased out annual revenue quotas, cut back on subcontracting to private elephant owners, and implemented regional logging bans between 2014 and 2016. In 2016, a year-long total logging ban was applied, followed by a ten-year teak logging ban specific to the forests of Bago-Yoma, and finally, a substantial quota reduction for the 2017/2018 season (Environmental Investigation Agency, 2019: 11).

In the wake of industry restrictions, elephant workers are experiencing job loss at a rate of about 40%, affecting approximately 2,500 individuals (Daw Khyne U Ma, in Fuller, 2016). Since they were either born into the industry or captured and trained to undergo regular labour, potential indicators of poor wellbeing have been noted following the sudden cessation of physical labour (Fuller, 2016). These include negative changes in physical health, a concern that may worsen over time based on evidence that 73% of Asian elephants in zoo populations are overweight[14] (Morfeld et al., 2016). Also noted are observations of stereotyped movements (Harris et al., 2008) which can indicate boredom, self-soothing, sensory repetition, or habits developed during working years (Mason and Latham, 2004). Elzanowski and Sergiel's study of an Asian elephant living alone in a zoo found that the

[14] Assessments used a visible body condition scale similar to that shown in Figure 1, which can screen for obesity and related issues but should not be considered the sole metric for assessing physical health (Morfeld et al., 2016: 13).

unfulfilled expectation of activity increases occurrence of stereotypies (2006: 231), suggesting the newly out-of-work population might be particularly susceptible.

Elephant owners struggle to sustain their families, employ oozies, or feed and provide veterinary care for their elephants, the latter being quite costly when not obtained through the MTE. Many owners have had no choice but to illegally sell their elephants to tourism sites in Thailand, enter them into processions, or rent them to tourism camps within Myanmar, possibly resorting to release if no employment or housing could be found (Fuller, 2016). Previously captive individuals are habituated to human presence and reliant on humans for food. It is likely they will seek out human habitats, increasing the likelihood of conflict or poaching incidents (Desai and Riddle, 2015; Nelson et al., 2003; Sampson et al., 2018; 2019). In addition, elephants are highly social creatures who form multigenerational matriarchal herds, a social structure not well suited to released individuals. Broken or makeshift herds would undoubtedly affect social connections, reproduction rates, and the psychological wellbeing of the animals, resulting in situations of high conflict potential such as competition between adult females for leadership and a lack of inherent hierarchy to manage young bulls (Bradshaw et al., 2005; Kontogeorgopoulos, 2009a: 430).

Methodology

Ecotourism is among the most accepted solutions for managing Asian elephant unemployment (Daud and Rahman, 2011; Kontogeorgopoulos, 2009a; 2009b; Sampson et al., 2019). Retirement camps ensure consistent access to medical care and enrichment activity while employing servers, guides, and handlers, and paying rental fees to owners (Suter et al., 2013). This keeps the economic value of elephants high enough to justify government support for the industry (Kontogeorgopoulos, 2009b: 10–12). I hope to extend the work of previous studies which considered such camps in Thailand through questionnaires provided to current visitors (Kontogeorgopoulos, 2009a) and interviews conducted with past visitors (Taylor, 2018). Conclusions offered in both studies are not necessarily representative of the current situation in Myanmar as they focus on the more established Thai elephant tourism industry, which employs the majority of captive working elephants in Thailand (Kontogeorgopoulos, 2009b: 8–9, 2009a: 430). This contrasts with the majority of Myanmar's elephant workers

either employed or semi-retired from the lumber industry (Begley, 2006: 18) offering a unique opportunity to shift the burgeoning tourism industry towards ecocentrism.

The primary methodology for this study is an analysis of public reviews of Asian elephant camps in Myanmar posted to the TripAdvisor website. TripAdvisor was chosen as the primary data reservoir due to the availability of open-ended text-based reviews in a comparative context. While tour operations, travel agents, and facility webpages might offer written testimonials, they are under the control of the independent sites and thus have the potential to be curated for the facility's benefit. Additionally, users would need to consider several different sources in order to compare visitor experiences across facilities, whereas TripAdvisor offers a one-stop tool for potential tourists to receive information about multiple sites. According to Forbes, prior to pandemic travel restrictions TripAdvisor boasted about 400 million unique monthly active users (Trefis Team, 2021), demonstrating the platform's value as a tool in visitor decision-making.

Due to the specificity of the investigation requiring the perspectives of visitors to elephant encounter tourist sites in Myanmar, convenience sampling was employed to collect all reviews posted to TripAdvisor's website between 2017 and 2020 via the following search terms: 'elephant', 'camp', 'encounter', and 'tourism'. Four facilities were omitted from analysis as they had fewer than six text-based reviews, giving a weak picture of their site and offering little to the overall analysis. Reviews from the remaining four sites were queried for their assigned star-rating values, with 1-Star being the lowest a reviewer can assign and 5-Stars representing complete satisfaction. Text responses were coded for overall positive or negative sentiment, connection experienced with the elephant individuals, perception of 'retirement', and any evidence visitors offered to support their assessment of the elephants' wellbeing. Discussions are further informed by my time spent working at the case study facility. Biases that exist in the decision to post a review likely produced a dataset more reflective of visitors experiencing extreme affective highs and lows over those feeling neutral post-visit. Table 1 shows the distribution of star-ratings across the dataset, demonstrating a lack of 2- and 3-star reviews. While this narrows the sample, it also substantiates the assertion that elephant encounters at these sites can elicit strong emotions and feelings of responsibility to advocate on behalf of the elephants for more ecocentric activities.

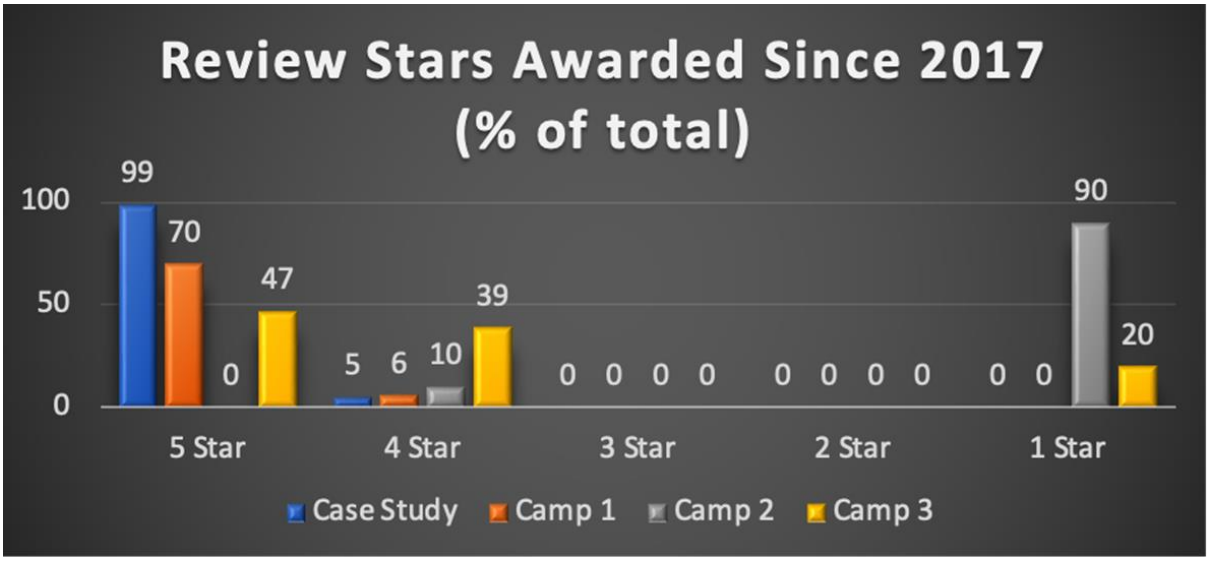

Table 1. Distribution of reviews by star rating

Alongside the correlation of positive sentiment with higher ratings and negative sentiment with lower, frequently used words were cross-referenced with star-rating to establish trends in their usage.

The following words correlated highly with 4- and especially 5-star reviews:

- Educate / learn
- Care / veterinary / medical / health / welfare
- Responsible / eco-friendly / sustainable

Alternatively, the following words correlated highly with negative reviews, though sometimes used in 5-star reviews only to note the absence of such factors:

- Cruel / abuse / hook / chain / restrain
- Sad / depressed / angry
- Sway / pace / fidget

These patterns suggest that the intention behind posting is to convey the emotional response they had along with the wellbeing of the elephant workers as they perceived it. While Taylor considers this call to ambassadorship through the perspective of interview respondents (2018: 76–78), and Kontogeorgopoulos reflects on the perceived knowledge gain during visits to elephant camps (2009b: 441–442), the issues with self-reporting inaccuracies and the influence of moralistic value assessments, especially regarding human attitudes

towards other animals, may play a role in how respondents conceptualise their attitudes and impact (Marino et al., 2010). The publicly posted, voluntary reviews of elephant encounter sites highlight the factors tourists deemed most worthy of sharing and offer examples of how ambassadorship manifests in practice. More importantly, it shows how that ambassadorship acts outside the scope of one's personal circles, and with the added layer of anonymity shielding the reviewer from possible judgements.

Discussion

Eco-centric employment and wildness

Ecocentrism works to recognise inherent value in all living things, irrespective of their utility or economic value to humans (Wearing and Neil, 2009: 17–19). An ecocentric approach to conservation recognises that humans, animals, and natural landscapes form a 'complimentary network of life' (Lainé, 2018: 281). Facilities can embody ecocentrism by offering more neutral activities like feeding rather than human-centric activities such as riding or circus performance (Kontogeorgopoulos, 2009a: 433). Recently, tourism sites in Thailand have begun framing their facilities as 'sanctuaries' where elephant workers are rescued or retired from more exploitative sites, a practice which Taylor suggests aims to draw in tourists who are becoming more welfare conscious (2018: 70, 75). A number of reviews highlighted this as reason to choose certain sites over others, often appealing to the readers' concern for elephants:

> If you really care about elephants and their welfare, this is THE camp to visit. It's all about the elephants and their choices and care. There are no elephant rides (which are bad for elephants) or shows. Instead, guests participate in helping care for a group of retired work camp and orphaned elephants by helping feed and bath them (TripAdvisor, 2019).

> The animals are not there to perform for tourists. Rather it is our privilege to take part in some of the work that needs to be done for their care (TripAdvisor, 2018).

Emphasis on the site being 'all about the elephants' reflects the moralistic justification for wildlife tourism, where the needs and desires of the animals involved are equal to or above those of the humans (Kontogeorgopoulos, 2009a: 430). I overheard the camp's welfare focus upheld by the founder, despite a loss of income, when tourists arrived without a reservation and were turned away. The founder explained to them that the elephants' wellbeing is their top concern and they had reserved full capacity for the day. This reflects the camp's ecocentric philosophy, proudly shared with every visitor, that 'to take care of the elephants and the forest is to take care of the Burmese people'.[15]

The camp enacts this through offering the elephants enrichment, ongoing medical care, pairing them with a single oozie, and allowing them to roam without hobble ties from 4:00 pm to 9:00 am each day, thus benefiting from the ecological impact of wild roaming patterns on biodiversity (see Lainé, 2018: 287). For the human employees of the camp, health insurance and social security are provided, as well as housing onsite for the families of the handlers. They maintain vegetable gardens to feed elephants, staff, and visitors, and a sapling nursery for reforestation efforts. In 2012, the founders worked with a partner organisation in the US to build a school in the nearby village, which they continue to support financially, offering daily transportation for the children living on site. This is funded by the $100 USD[16] cost per visitor for a day at the camp, which includes time spent feeding and bathing the elephants, as well as education about the history of the Myanmar timber industry, Asian elephant anatomy, veterinary procedures and equipment, and the production of 'ele-poo' paper. Each visitor can also plant a sapling to symbolically assist in the reforestation efforts while learning about the previously logged land on which the camp resides. 19 of the reviews showed excitement at the visitors' inclusion in this effort, albeit in passing as the elephant encounter, not agrotourism, was the focus of the experience.

The adult elephants residing at the case study site are retired from the timber industry, some having also worked in processions or performance. As working hours come to an end, visitors can watch as the oozies lead their elephant partners away from the tourist area to the large, protected roaming grounds, a view shown in Figure 2.

[15] Explained to me directly by the camp founder as we began our day, 7 November 2019.
[16] Each member of our volunteer team supplemented this $100 per day so that our presence on site did not negatively impact the site's income by reducing their capacity for paying visitors.

***Figure 2**:* Peace and her oozie walking to the roaming grounds at the end of the day, with no chains or ropes on her legs. Credit: Hollis Burbank-Hammarlund (teammate) November 2019.

These elephants are considered 'semi-captive', a liminal status which straddles the concepts of 'captive' and 'wild'. Offering visitors the above visual emphasises and romanticises the wildness, further blurring those categories. Akin to Tully and Carr's discussion of animals in farm tourism being marketed as 'farm animals' rather than 'farmed animals' (2021: 84–85), the elephants at ecocentric sites are presented as *living at* the sanctuary site and *choosing* to interact with visitors rather than employed or utilised by human owners.

Acampora likens zoo exhibitions to pornographic imagery in that the consumption of either reduces participant subjects to visual objects, erasing their value and meaning beyond that which is established by the onlooker (2005: 74, 75). I consider the meaning presented by those curating an exhibit to be equally relevant as it guides onlooker perceptions, just as photographers and editors influence pornographic imagery. The presentation of the elephant encounter culturally reinforces the perception of interactions one could only have with a captive being as representative of how that animal might engage in a wild setting (Burns, 2015). I certainly would not approach a truly wild elephant and attempt to hand-feed them a slice of pumpkin or give them a bath, yet elephant encounter tourism presents these activities as engaging in 'natural' behaviours. Acampora contrasts viewing zoological exhibitions as demand for the visual spectacle of a 'wild' animal with orphanages, rehabilitation centres,

and ecotourist excursions (2005: 77), which he considers environments that offer a more 'natural' experience (2005: 82, 83). I argue this distinction cannot be made as rigidly as Acampora implies. Is the visual offered above not a spectacle designed to reinforce the perception of 'sanctuary' as desired by camp owners?

Facility control of the 'wildness' narrative is evidenced in the reviews, where 18 of the 47 instances of the word 'retire' in the case study dataset suggested reviewers considered the resident elephants to be fully 'retired', compared to zero instances of 'retire' among reviews for the other three camps. This perception often included an idyllic sense of their return to 'natural' lives:

> The camp is dedicated to letting them be elephants as most of them have had many years of working in the timber business (TripAdvisor, 2017).

> Here there is no ride, no silly games with the wild animal, just sharing nice daily moments with the majestic and in danger animal. the best moment is for sure the bath time (TripAdvisor, 2019).

This reviewer does acknowledge how a lifetime of work might influence the elephants' behaviour in retirement, though they still perceive the interactions they shared as natural:

> The elephants' needs are put first and the interactions are natural - no riding on their backs, or getting them to do tricks. Just natural elephant behaviour - or as natural as can be for an animal that has been working for humans all its life. These elephants are being given a proper retirement and visiting the sanctuary helps to fund their pension (TripAdvisor, 2018).

This illusion of natural interaction often necessitates harsh training methods to ensure elephants follow instructions and behave safely around humans (Kontogeorgopoulos, 2009a: 430). At the case study camp only positive reinforcement training was observed, though the

oozies on site each still carry an ankus. As these 'retired' elephants all come from performance or logging and have therefore been previously 'tamed' through often violent methods, the ankus acts as a visual deterrent to disobedience. Tourists often seem oblivious to this (Taylor, 2018: 30), despite the education about their life histories being offered on site. The cognitive dissonance is evidenced by the distinction this reviewer draws between 'tie' and 'chain':

> The elephants stay in the centre during the day and while tied with a rope for feeding, it is not a case of 'chaining' them [...] In the evening, they are allowed to return to the wild with their mahoot [sic] (TripAdvisor, 2017).

As well as this reviewer advocating for less monitored access to the elephants:

> I know that the camp is very careful about our safety, but don't be too much..[sic] walking with them to go to the river is not that dangerous, we can do it ![sic] And we will be so happy […] (they can move and move, and even dance, they are happy!!!), it would be so great to see them walking, totally free when we feed them, especially if we are a small group of 2 or 3 (TripAdvisor, 2017).

The common perception of 'retired', 'natural', and 'wild' demonstrates the effectiveness of the elephants performing 'elephant' for tourists (Endicott et al., 2016; Guo, 2021; Tully and Carr, 2021). That is, holding simultaneous roles as an individual in need of care and support, an ambassador for the species and lumber workers, and a commodity via which tourism is sustained. Only one reviewer acknowledged this and felt inclined to educate readers on the fact that these elephants work:

> The sad thing is that there are only 7 elephants here enjoying a decent life while thousands are still being exploited elsewhere in the country. Also, keep in mind that these 7 elephants are not really retired. They might not be working in harsh environments, but they are still working to attract well-paying visitors to get

> themselves fed and also helping to create employment for over 40 people at the camp. They now get paid to be cute and adorable for thousands of visitors a year (TripAdvisor, 2017).

Though the reviewer wants to be clear that the elephants are not retired, they do not consider them exploited as in other industries, but rather paid to simply 'be adorable' for 'thousands' of interactions per year. This reflects how labour is classified more broadly, including in literature surrounding elephant encounter tourism. Regarding the ecocentric camp Kontogeorgopoulos studied, he comments:

> As a sanctuary, TRC acquires elephants that are abused, abandoned, or injured in logging or tourism. There are approximately 30 elephants in TRC, and no work is required of the elephants; instead, tourists pay for the opportunity to feed, observe, and bathe (2009a: 433).

Interestingly, Kontogeorgopolous does not consider the time spent under the tourist gaze, or enduring physical contact from innumerable strangers to be 'work' (2009a: 437–438). He does acknowledge other welfare issues with ecocentric camps, such as unnatural social groups, limited access to dietary variation, and injury from camp activities or use of the ankus (Ibid, 2009a: 430, b: 5–7), but not how these factors produce a situation more akin to a workplace than a sanctuary. Recognising how ecocentric sites utilise elephant labour uncovers their potential to advance better working conditions by supporting the distinct needs of every individual, human or elephant, involved in their operation (Coulter, 2017a: 37–38, 2017b: 174–175; Dashper, 2021: 32).

Witnessing and advocating

Several camps offer the opportunity to participate in the animals' care by assisting oozies with bathing their elephant, an experience that reflects the intimacy and empathetic connection on which 'becoming animal' (Dave, 2014: 446) is predicated. On my first day at the camp, I

joined a teammate and oozie in scrubbing Wednesday,[17] a magnificent 67-year-old matriarch. She leaned forward and pressed her forehead to my chest, and I felt her deep fatigue wash over me as her shoulders and back relaxed slightly. I froze in that moment, likely only seconds though it felt like an eternity, wondering how I could ever offer adequate comfort for the immense pain and trauma she must have experienced in her first 60 years.

Moments of intimacy (Dave, 2014: 434) are not often part of visiting 'Western'[18] captive facilities. As a parallel, I received a 'kiss' from two sea lions at Marineland, Ontario as a child, the excitement of which I vividly recall. Yet I can't say I knew, or even really met these individuals beyond their performance of jumping to the edge of their tank and pressing their whiskers against my cheeks. Recognising Wednesday's daily enduring of baths from strangers is also a performance, one enacted by her but constructed through the presentation of care work by the camp, calls into question if I can truly know her either. Still, in that moment I felt a shift from concern for Asian elephants as a marginalised group to identification with and compassion for the individual; a call to speak on her behalf and on behalf of those like her (Dave, 2014: 450, 444–445).

Tourists performing the motions of care lack the necessary intersubjectivity and self-sacrifice of true care work (Hurn and Badman-King, 2019: 150) and may not fully reflect a deep interpersonal moment of becoming animal due to its constructed nature. Yet, as for many of Taylor's respondents (2018: 76–79), the impulse to advocate for the elephants appeared in several reviews, both positive and negative:

> **IF YOU LOVE ANIMALS, DON'T GO THERE !!! – 1 Star**
> Very sad ... How to say, chains (some Elephants have both front legs chained with 1 feet space between), I am not very emotional but could not avoid to cry... I paid for it, so now I need to do this to feel a little bit better, that was a big mistake, please don't do it... (TripAdvisor, 2017).

[17] Name loosely translated to protect her anonymity.
[18] While a problematic concept, and possibly better represented by terms such as 'Global North', the aim is to contrast with ecotourism or reserve facilities.

> **<u>Bathing elephants in the river - are you kidding me?!?!? DO THIS!!! – 5 stars</u>** You can ride the elephants if you want. We chose not too. Give these creatures a break! They don't need your lazy, fat butts on their back (TripAdvisor, 2019).

Even the reviewer enthusiastic about bathing the elephants felt called to poignantly direct readers away from an activity they considered cruel.

Bear reflects on how encounters with individual animals produce a purely relational understanding of the other, devoid of any aspects of their lives outside that moment (2011: 302). Despite its narrow and often curated nature, 'chopped and packaged for our convenience' (Johnston, 2008: 646), the encounter is a very 'real' moment of connection for the individual experiencing it (2008: 642). Face-to-face with another being, tourists perceive them as their own person (Milton, 2005: 260), with thoughts, emotions, and preferences:

> Each elephant has a different personality and it was wonderful to get to experience this through the extensive engagement (TripAdvisor, 2017).

> Feeding them was a treat to get to know all their individual personalities and only one or two people are allowed to bathe them with the guides allowing for an even more personal connection and experience (TripAdvisor, 2017).

> We had the opportunity to feed all of the elephants which was great, such huge animals yet so gentle all of which had their own distinct personality (TripAdvisor, 2019).

> It was great fun to help feed the animal [sic], each one has a distinct personality (TripAdvisor, 2017).

> Their personalities are quickly apparent [sic] and we enjoyed feeding them, watching them and learning about them (TripAdvisor, 2017).

When tourists are offered the opportunity to learn about each of the elephants' life histories – employment, health concerns, behavioural indicators of trauma such as stereotypies, and the story behind their names – they become more complete individuals beyond this singular individual moment of interaction (Bear, 2011: 300; Huff and Haefner, 2012; Johnston, 2008). Education and storytelling, alongside care-focused interactions, foster an empathetic connection between tourist and elephant and act as a powerful motivator towards more ecocentric and symbiotic choices when travelling.

Guilt, responsibility, and saviourism

Individual experience of guilt and responsibility operates within an established global system of dependency, encouraging 'fortunate' people to save or support those deemed 'less fortunate' (Jefferess, 2021: 4). Globalisation continues to coercively underdevelop and exploit nations of the Global South for their labour, resources, and entertainment, reinforcing this reliance and allowing nations of the Global North to act as saviour against the ramifications of that very exploitation (De Oliveira Andreotti, 2014; Polus et al., 2022). Imperialism provides access and justification for transnational humanitarian aid in the form of individual altruism and large scale governmental or charitable action (Jefferess, 2021; McCurdy, 2016). This globalised sense of responsibility towards a constructed, and often invisible, silenced, helpless other (McCurdy, 2016: 25; Polus et al., 2022: 6) naturalises a self-celebrating mentality around industries such as tourism, inseparable from the individual actions and actors who perpetuate it (Jefferess, 2021: 2, 4, 9).

The below 5-star review highlights the impact of one's tourism dollars as if to justify the selfish desire for an experience only possible because of global inequity:

> […]proceeds support the mobile elephant vet clinic for the region. The camp also supports the local school and contributes to elephant conservation and vet science programs to help save Asian elephants that are endangered […] highly recommend it for people who want to help elephants and have the experience of a life time [sic] (TripAdvisor, 2019).

Several reviews note the high price of the experience alongside caveats designed to encourage readers that the price is justified. Some, like above, describe where the money goes while others state they would rather pay this much than attend a camp where the elephants seemed unhappy, forcefully controlled, or in poor health:

> We felt that the cost of USD100 per person is reasonable for what the organisation is doing (TripAdvisor, 2017).

> Quite an expensive entry fee but elephants cost money to upkeep! –(TripAdvisor, 2017).

> Elephants appear extremely well cared for. Not like other experiences where they are chained unless ridden or made to perform. Definitely worth the cost (TripAdvisor, 2017).

Ecocentric tourism sites offer an updated lens to build upon Mullin's discussion of the 'animal mirror' as a window through which to analyse cultural behaviour (1999: 211–212). Animal encounter tourism that presents an ecocentric picture – one where the animals depend on the facilities and tourists to thrive yet can still be depicted as 'wild' – allows us to see a 'good' tourist in that animal mirror, a tourist who is making a lower negative impact by avoiding elephant rides and circus performances, or even perceiving our impact as a positive one through the distribution of our dollars and the advocacy we engage in to direct the behaviour of others. Ecocentric tourists can imagine themselves to be less exploitative if they can see the being they encounter as one who needs their help, evading any felt responsibility for the hardships the animals and people have experienced and shirking any guilt felt about their travels.

As a self-proclaimed 'animal lover', I had decided never to partake in animal encounter tourism at home or abroad, yet when the opportunity arose via a colleague to assist with this project, I jumped at the chance. I initially viewed it differently, as a sacrifice of my time and finances for the purposes of 'doing good'. During the trip I began to consider how my own

choices reflect a saviourist mentality, exacerbated by the pull I felt when engaged in that moment of connection with Wednesday. Is my presence in her home, my money, my voice halfway across the world, doing anything beyond perpetuating the globalised system of reliance? Those experiences, engaging with the eight souls at the camp and witnessing their injuries and suffering through storytelling, all acted to strengthen my concern for them and for elephants, but can I really consider my work there 'good'? Am I writing this with the same energy as the 1-star reviewer quoted above, 'to feel a little bit better'? I suppose those are reflections I will continue unpacking for a while, though I find it interesting how my own emotional response to the experience reflected those found within the facility reviews, despite what I had considered a very different intention.

Conclusion

Ecocentric camps offer a balanced solution to the large numbers of previously working Asian elephants who are no longer fit for life in the wild. While the elephants' main 'job' is to receive food, baths, and affection from tourists, it's important to recognise that this performance of their species and engagement with strangers is a form of labour. Though their current expected job duties seem to contrast positively with their histories of arduous physical labour, further research should consider how we might assess, measure, and regulate standards of job satisfaction and welfare with these elephant workers. A major impediment to humane elephant labour in tourism is the fact that welfare protocols are independently determined at each facility (Kontogeorgopoulos, 2009b: 12–14). The development of overarching regulatory documentation is a necessary step toward a more ethical and humane tourism industry. Additionally, there was a notable disparity in the number of text-based reviews at each site between 2017 and 2020. The case study site had the highest number of available reviews, at 144, while the camp with the lowest number had only 17. Likely more than a product of visitors' motivation to post, further investigation is needed into potential geographical, political, and economic reasons.

In the meantime, an understanding of how the experience of witnessing the elephant residents' suffering through their stories and sharing a moment with the elephant individual might have a lasting effect on visitors could be used to guide facility programming. Despite the imperfect state of ecotourism highlighted above, I believe there is value in the ecocentric

facilities' focus on education and care. The impact of engaging with another being and learning their story can lead to feelings of responsibility towards them and the species group they represent. Making tourists aware of the impact of various activity choices to the elephants and teaching the history of Myanmar's captive elephant management likely drives visitors to pass along this information in an effort to extend their impact. Ultimately, this could push tourists, and eventually facility operators, towards a less anthropocentric Asian elephant tourism industry.

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The Donkey Problem: A review of donkey literature relating to their use in animal-assisted interventions

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Since their domestication, *Equus asinus* have been employed by humans in a range of roles from draft animals to companion animals. However, basic areas, such as healthcare and nutrition, within the field remain insufficient despite tremendous growth in the past two decades. The donkey's unique history informs the current state of research and attitudes surrounding donkeys. Historically, donkeys have been unfairly expected to meet the standards placed on the horse, a different species. These harmful comparisons carry over into modern literature. To ensure ethically sound practice in donkey assisted activities and therapies, a growing industry in developed nations, a more comprehensive body of research is required. This literature review is an examination of current research on donkey history, nutritional guidelines, healthcare, and donkey use in animal-assisted interventions to identify ethical concerns for the donkey in therapeutic and companionate settings and inform ethical considerations for researchers, practitioners, caretakers, and guardians.

Keywords: donkey, donkey welfare, animal-assisted interventions, ethics, research

Introduction

The role of the donkey (*Equus asinus*) has significantly changed since their domestication 5,000–6,000 years ago (Rossel et al., 2008). Many societies, including ancient Egypt and Greece, exploited the donkey by relying on them for extensive manual labour, ultimately working them to death (Rossel et al., 2008; Yilmaz, 2013). Presently, while donkeys continue to be utilised as work animals, they have also evolved to become companion animals and participants in animal-assisted activities and therapies (AAT), more broadly referred to as animal-assisted interventions (AAI). Despite still being used extensively by humans for draft

work, milk, meat, skin, AAI, as companions, and in human medicine, the existing donkey research remains limited and difficult to access (McLean and Gonzalez, 2018).

In this paper, a focus will be placed on the impact such limited research has on donkeys being used for AAI. Therapeutic interventions involving animals fall under the category of animal-assisted interventions (AAI). AAI does not have one clear definition, but professionals agree it serves as an umbrella term for animal-assisted activities (AAA) and animal-assisted therapies (AAT) (Borrego et al., 2014: 86). AAA can be therapeutic but does not require the presence of a therapist and cannot be billed to insurance, as it is not a medical service (Morrison, 2007). AAT, on the other hand, must be conducted in the presence of a certified therapist, or an equivalent specialist and can be billed to insurance because it is classified as therapy (Morrison, 2007). Donkeys being used for therapeutic interventions are either ridden by small individuals for a variety of therapies or used as facilitators in psychotherapy. However, research regarding donkey AAI remains limited, thus creating an ethical concern for the humans and animals involved (Galardi et al., 2020; Portaro et al., 2020). As donkeys increase in popularity as companion animals and for use in AAI, having a solid foundation of research relating to donkey welfare is imperative.

The history of the donkey likely informs the state of donkey research and welfare. Donkeys evolved as desert animals unable to live in herds, making stoicism imperative to their survival (Burden and Thiemann, 2015). Health conditions often influence behaviour and even subtle behaviour changes can indicate a larger issue (Burden and Thiemann, 2015). As a result, insufficient knowledge of health conditions can pose an ethical risk to the humans and donkeys participating in donkey-specific AAI. In a recent publication, Toribio (2019) highlights the importance of improving medical research for the donkey by asserting the donkey's historical and modern usefulness to humans as well as the unwarranted abuse donkeys endure on account of humans.

According to the World Organization for Animal Health, the most basic standard of human care for nonhuman animals falls under the conditions of the Five Freedoms (Brambell, 1965; OIE, n.d.). These Five Freedoms are ‘freedom from hunger, malnutrition and thirst; freedom from fear and distress; freedom from heat stress or physical discomfort; freedom from pain, injury and disease; and freedom to express normal patterns of behaviour’ (Brambell, 1965: 85). Given the current, negative attitudes and stereotypes surrounding

donkeys, coupled with the deficient state of research regarding their welfare, this standard is not as attainable as it should be. For example, a significant portion of donkeys being kept in developed nations, including the United States and the United Kingdom are obese, likely due to a lack of educational resources and improper veterinary care (Burden and Thiemann, 2015; Costa et al., 2019; Fernandez et al., 2021). Professionals in developed nations have a responsibility to ensure resources to make the Five Freedoms attainable are easily accessible to guardians and caretakers. If the Five Freedoms are not attainable, those employing donkeys as companions and participants in AAI should reconsider as denying the Five Freedoms, or failing to strive for them, is inherently unethical.

As a species, donkeys are frequently misunderstood and overlooked. The donkey has routinely and mistakenly been considered a small horse with big ears (Burden and Thiemann, 2015). Common, even dangerous misconceptions, about the donkey are numerous including that they do not feel pain, and are lazy, stupid, and stubborn (Burden and Thiemann, 2015). Researchers speculate that donkeys have been the most demeaned animal historically (Mclean and Gonzales, 2018). These historically derived stereotypes continue to affect current attitudes toward how donkeys are treated and the status of donkey research.

Domestication and history

The history of donkey domestication and the donkey's role throughout human history continues to negatively impact the donkey. Donkey labour has been essential in the development of human societies, most notably in the Fertile Crescent where much of 'Western' civilisation was born (Gregory, 2007; Rossel et al., 2008; Yilmaz, 2013). Despite their importance and contributions to human economies, donkeys were continually exploited and abused (Gregory, 2007; Rossel et al., 2008). Presently, donkey domestication, as understood by archaeologists, began between 5,000 and 6,000 years ago in ancient Egypt (Rossel et al., 2008: 3715). Linguistic evidence from multiple African tribes suggests donkeys may have been domesticated in Saharan periphery prior, but archaeological evidence is absent (Wang et al., 2022: 2). Given that donkey domestication is relatively recent, donkey history deeply contributes to the current attitudes that beset donkeys in literature.

In Egypt, a set of ten donkey remains were discovered buried in close proximity to pharaohs, informing the current understanding of donkey domestication (Rossel et al., 2008: 3716–3717). The location of the remains demonstrates the value and importance donkeys held to Egyptian life. However, the bones and joints of the excavated skeletons suffered extensive damage resulting from application of external force, or carrying heavy loads (Rossel et al., 2008). While Egyptians clearly recognised the value of the donkey by burying them close to royalty, donkeys were still abused for their ability to perform labour at low costs (Gregory, 2007: 194; Rossel et al., 2008: 3715). They were valuable as objects, rather than as sentient beings. Even in cultures where donkeys were highly revered, donkeys still received poor treatment as they were utilised as tools and objects with little consideration of the toll it would take on their bodies and wellbeing.

Ancient Greek literature documents early donkey stereotypes extensively. In ancient Greece, donkeys were popular to own since they were inexpensive to maintain, required limited food and water, and served as useful work animals particularly compared to horses (Gregory, 2007: 194–195). Greeks used the same derogatory language to describe donkeys as they did women and slaves, while horses were treated almost as human (Gregory, 2007: 202). Simonides of Amorgos, an ancient Greek poet, provides an example of this in a poem describing different types of women using animals assigned anthropomorphic qualities (Svarlien, 1995; Freeman, 1945). His poem includes horse-type women and donkey-type women, a horse-type woman is described as ‘horse (luxury-loving, proud, and expensive)’ while a donkey-type woman is:

> the woman who takes after the donkey—the ashgrey, obstinate donkey: she will do her duty only if compelled and bullied, and meanwhile she sits in a corner or by the fire, and eats and eats, all night long and all day (Freeman, 1945: 35).

While the portrayal of the horse here is not particularly positive, it remained superior to that of donkeys. Additionally, horses were still symbols of beauty, status, and received olive oil in their manes and wine mixed in with their grain (Gregory, 2007: 198). Nonetheless, such comparisons resulted in negative stereotypes that continue to impact attitudes towards

donkeys, including stubborn, lazy, stupid, and self-willed, that never afflicted horses (Gregory, 2007).

These stereotypes arose from differences in donkey genetics and evolutionary behavioural attributes between the two species (Burden and Thiemann, 2015). Throughout history, humans often expected donkeys to meet the standards of horses behaviourally; however, comparing two different species in this manner is inherently unfair. Donkeys evolved in desert conditions with limited resources that prohibited them from living in herds thus rendering them less flighty than horses and making their metabolisms more energy efficient for survival (Burden and Thiemann, 2015:377-878). As donkeys are less flighty than horses, they fundamentally respond differently than horses (Burden and Thiemann, 2015). Donkeys can be slower to respond to cues and stimuli which is often mistaken for a lack of intelligence (Burden and Thiemann, 2015). Donkeys learn quickly but require an individual educated in donkey behaviour (Burden and Thiemann, 2015:377). The comparison between the two species is still present in many settings and contributes to the deficits in donkey care and research.

The portrayal of donkeys through history is overwhelmingly negative, but positive documentation does exist. For example, the Australian and New Zealand Army Corps used donkeys to carry equipment and the troops viewed them as pets and companion animals while in the field (Yilmaz, 2013). The most famous example is the story of Australian and New Zealand soldier (ANZACs), Simpson, and his donkey during the WWI Gallipoli campaign (Education Services Australia, 2010). Private John Simpson Kirkpatrick used his two donkey companions to carry men injured in battle to the first-aid station (Education Services Australia, 2010). Simpson became known as ‘the man with the donkey’ and is a symbol of friendship in Australia (Education Services Australia, 2010). Additionally, the Romans dedicated a holiday to working animals, including donkeys, to honour their labour, service, and sentience (Freeman, 1945). Unfortunately, however, documentation that degrades the species is more common. Greek social hierarchy dictates horses are to men as donkeys are to women and slaves (Gregory, 2007). The negative stereotypes born out of ancient Greece are far more enduring than the positive ones and they continue to disparage the donkey.

Donkey use today

Presently, donkeys remain essential to the agriculture and economy in developing nations, such as in Ethiopia where a substantial population of working donkeys reside (Nesredin et al., 2017). In developed nations, such as the United States and the United Kingdom, the need for donkeys as draft animals is almost obsolete. However, donkeys have adopted new roles as companion animals and participants in AAI, and donkey milk and meat have gained popularity in Europe (Burden and Thiemann, 2015; Camillo et al., 2018).

According to Italian healthcare providers, donkeys have become more popular for AAI because they are less expensive to maintain than horses, serve as social lubricants, and allow clients to engage in non-judgmental relationships with the animals; also, their neotenic features, such as small size and long ears, enhance the therapeutic relationship (Galardi et al., 2020; Portaro et al., 2020). However, compared to horse/pony AAI, donkey AAI has a much more limited body of research (Portaro et al., 2020). Portaro et al. (2020) assert that donkeys provide a much different therapeutic experience than horses but this experience is severely under researched. As a result, donkey-assisted therapy cannot be considered a clinically proven therapeutic modality in the way that horse-assisted therapy is.

Figure 1*. Donkey lying down on her day off from AAI. Taken by author, June 2021.*

In the United States, little research has been devoted to the donkey and the status of overall donkey welfare in the country remains unknown even though donkeys have adopted new roles as companions and participants in AAI (Fernandez et al., 2021). Resources are difficult to locate, and what is easily available to the average donkey guardian is vague. For example, the University of California Davis (UC Davis) hosts the Donkey Welfare Symposium, but the presented information is difficult to find and, in some cases, few articles were published succeeding the presentations. In comparison, the United Kingdom and Europe have made significant progress in advocating for donkey welfare. Non-governmental organisations, namely the Donkey Sanctuary in the UK, have made their presence known and provide easy access to resources and support. These resources are available in the US but accessing them can be difficult. In the US donkeys require more care than they currently receive as a result (Fernandez et al., 2021).

Today the Donkey Sanctuary, located in the UK, has pioneered research regarding donkey welfare and set a standard for donkey care (The Donkey Sanctuary, n.d.). The Donkey Sanctuary has provided data on common health problems and welfare concerns in their donkey population. In the United States, there are sanctuaries but there is no equivalent research organisation and little is known about donkey demographics in the States. The closest equivalent providing resources is the Bureau of Land Management (Bureau of Land Management, 2020a), a US government agency that manages the wild horse and burro populations. Through its adoption programme, it provides a limited guide on how to care for horses and burros containing vague information surrounding standards of care, including nutrition, grooming, and healthcare. In the US, UC Davis has dedicated resources towards donkey research by hosting their Donkey Welfare Symposium; however, their scope of donkey research remains limited as information following the Symposium does not appear to be published from prior symposiums. As a result of the COVID-19 pandemic, UC Davis made the 2021 Donkey Welfare Symposium available for viewership to the public on YouTube. The Symposium does not address deficits in research or suggest that producing additional donkey research independent of horses should be a priority for veterinary professionals.

Donkey nutrition

Significant progress has been made in donkey nutrition in recent years due to non-governmental organisations, namely the Donkey Sanctuary, who have advocated for donkey welfare and select individuals who have taken interest in donkey welfare (The Donkey Sanctuary n.d.; Toribio, 2019). However, donkey nutrition has been overlooked for far too long. In fact, donkey specific nutritional research did not begin until 2005 as cited in the *Equine Veterinary Education* journal (Burden, 2012). Burden of the Donkey Sanctuary notes that previous recommendations:

> estimated that donkeys required 75% of the nutrients that would be given to a pony of the same size (Svendsen, 1997). Research funded by the Donkey Sanctuary established that these guidelines significantly overestimate the digestible energy requirements for maintenance (2012: 589).

The above recommended guidelines remained the standard for decades and donkeys continue to be overfed. Given that in both the US and the UK a large proportion of donkeys suffer from obesity and related diseases, those caring for donkeys may be unaware that new guidelines have been developed or that donkeys should be fed differently than horses (Costa et al., 2019; Fernandez et al., 2021). To the average person, especially in the United States where an underwhelming amount of donkey research exists, basic information on nutrition is difficult to locate. In the initial stages of this research, I spent over 50 hours searching for material, aided by two department faculty members, with marginal success. It was only after seeking guidance via email correspondence with Michelle Whitham Jones, a prominent donkey researcher, following my presentation at the Anthrozoology as International Practice: A Student Conference in Animal Studies in March 2021, that I could locate the most recent research as she provided names of researchers, links, and specific studies. Use of updated guidelines by guardians, caretakers, and clinicians may not be common practice in developed nations, like the US, because the research is not easy to locate.

McLean and Gonzalez (2018) note that in industrialised nations the combination of excess nutrient-dense food and light workloads leads to obesity and associated conditions. A

poor understanding of nutrition in industrialised nations heavily disadvantages companion donkeys and those participating in AAI as the roles are rarely physically demanding. Knowledge of educational resources in the US is likely lacking as no predominant organisation, such as the Donkey Sanctuary in the UK, exists to disseminate the information and advocate for donkey welfare on a comparable scale. Issues regarding obesity and accompanying conditions could be managed if more educational resources become available. At the time of this publication, demographics on donkeys living in the States have yet to be established as it has in the UK. Demographics would serve as a useful diagnostic tool to address overwhelming gaps in nutritional information in the US.

The Donkey Sanctuary provides comprehensive feeding guides for the average donkey guardian and detailed information for clinicians. For the average adult donkey, standard nutritional information for both clinicians and guardians is available, while deviations from the average donkey used for research do not have the same calibre of detailed, researched information (Burden and Bell, 2019). For clinicians, resources from the Donkey Sanctuary, and publications such as *Diseases of Donkeys and Mules, An Issue of Veterinary Clinics of North America: Equine Practice* (2019) have the most recent information regarding the feeding of the average donkey. However, these resources recognise that feeding information for donkeys deviating from the standard, including pregnant and/or lactating jennies, foals, overweight, underweight, and sick donkeys do not have enough research and information (Burden and Bell, 2019; The Donkey Sanctuary, 2018). Much of the information published regarding these topics explicitly states that professionals specialising in donkey care derive guidelines from their experience rather than from formal research (Burden and Bell, 2019; The Donkey Sanctuary, 2018). While experience should not be overlooked, it still remains that a notable amount of the available guidelines lack empirical backing. In fact, current guidelines acting as the standard of care for refeeding severely underweight donkeys come from the guidelines for horses (The Donkey Sanctuary, 2018). As long as crucial areas of standard care for donkeys come directly from horse guidelines, care for donkeys remains compromised.

Additionally, in donkey veterinary medicine, vitamin, mineral, and protein requirements remain widely overlooked. The current guidelines on this information are extrapolated from horse guidelines (Burden and Bell, 2019). However, current research documents significant differences in donkey metabolism and fluid balance, making further

research on such requirements warranted (Burden and Bell, 2019; Grosenbaugh et al., 2011). According to Burden and Thiemann of the Donkey Sanctuary:

> Protein metabolism and utilization in the donkey appears to be complex, and experience would indicate that donkeys can survive on low-quality protein-containing diets than can horses as evidenced by their ability to survive, breed, work, and grow on forages containing low-quality protein (Burden, personal communication) (2015: 378).

Prioritising this discounted area of research may have a large impact on donkey welfare given that vitamin, mineral, and protein requirements comprise fundamentals of healthcare (Burden and Bell, 2019). Research indicates that the current guidelines are sufficient; however, deferring to horse research and experience continues the outdated comparison between species and normalises inadequate care (Burden and Thiemann, 2015).

Donkey healthcare

Donkey healthcare and research continue to gain separation from horse literature and treatment; however, extensive comparisons to horses remain. For example, only recently has donkey metabolic syndrome (DMS) been differentiated from equine metabolic syndrome (EMS) despite being a common disease afflicting donkeys, especially in developed countries (Mendoza et al., 2019). While the diseases are quite similar, they have inherent differences due to the species differentiation (Mendoza et al., 2019). Many areas of donkey healthcare remain compromised as clinicians tend to default to horse research (Toribio, 2019). Toribio (2019) has dedicated an entire journal to donkey diseases in order to spread awareness around the lack of medical information, highlight the importance of the donkey, and continue to push professionals in the field to work towards better healthcare for donkeys and mules. For the scope of this paper, the diseases and diagnostic tools discussed will not be comprehensive, but a focus will be placed on health concerns more likely to afflict donkeys employed as companion animals and for AAI.

Obesity is one of the most common, preventable conditions affecting donkeys in regions where AAI is popular (McLean and Gonzalez, 2018). Donkeys suffering from obesity have a greatly increased risk of developing often fatal lipid disorders such as hyperlipemia and donkey metabolic syndrome (DMS) (Mendoza et al., 2019). Treatment options are extrapolated from those used in horses but there are enough physiological differences between the species that warrants donkey-specific empirical research evidenced by the recent differentiation between the two diseases (Mendoza et al., 2019). Seeing as these conditions are widely preventable, guardians and caretakers would ideally enlist the appropriate diet and exercise plans to avoid these conditions (Burden and Thiemann, 2015). However, preventative measures may not be instituted appropriately, if at all, for reasons such as a lack of resources and knowledge, so alternative measures may need to be enlisted. For example, an obese donkey should be put on a weight loss programme under supervision of a veterinarian, but safe weight loss protocols have not been established for donkeys (Mendoza et al., 2019). Because donkey nutrition is not well understood by many guardians and treatment options remain limited, donkey welfare is compromised. The Donkey Sanctuary provides resources for clinicians on such topics, created out of their combined experience and expertise, representing the current gold standard of care but it is not all empirically based.

In donkey veterinary medicine, not many donkey-specific reference ranges for diagnostic tests and wellness screenings have been established. Many reference ranges used for donkeys are taken directly from horse literature (Mendoza et al., 2018). Using ranges intended for horses can be dangerous as it may lead to misdiagnosis and improper or unnecessary treatments (Mendoza et al., 2018). For example, hyperlipemia can be diagnosed in donkeys by measuring serum triglyceride levels in the blood, but the ranges used for donkeys are the same as used in miniature horses and ponies (Mendoza et al., 2019). Mendoza et al. (2019) believed that range cut-offs could be higher in donkeys due to physiologic differences, establishing a need for further research. Donkeys experience lipid disease at a higher rate than any other equid yet have the smallest body of research (Mendoza et al., 2019). In addition to serum triglyceride concentration, there are other biomarkers that have still not been evaluated in donkeys including but not limited to: phosphorus, serum total

magnesium and calcium, as well as age-specific vitamin E requirements (Mendoza et al., 2018; Mendoza et al., 2019).

Cardiovascular diseases in donkeys are underreported and underdiagnosed due to the misconception held by many clinicians that such diseases are a rare occurrence in the donkey (Mendoza et al., 2018). A limited amount of research has been conducted surrounding cardiovascular diseases in the donkey; however, they are likely just as prevalent in donkeys (Mendoza et al., 2018). To address this, clinicians should routinely monitor heart conditions through electrocardiography and echocardiography. Donkeys are less likely to be diagnosed with cardiovascular diseases than horses as they are not typically high-performance animals, especially donkeys kept as companions and for AAI, so poor performance is not a reliable indicator of heart problems as it often can be in horses (Mendoza et al., 2018).

In the context of keeping donkeys as companion animals and for use in AAI, donkey healthcare independent of horse healthcare bears important relevancy. Regular health screenings and monitoring need to be conducted by both the primary caregiver and veterinarian. It is not clear if clinical screenings and caretaker monitoring are regularly performed across these demographics of donkeys. Screenings should be completed annually and should include overall wellness exams and tests recommended by a donkey-informed veterinarian per recommendations from The Donkey Sanctuary's *Donkey Care Activity Calendar* (2020). Many veterinarians, caretakers, and guardians believe the misconception that donkeys are just horses with large ears, a stereotype that hinders the level of care donkeys receive (Burden and Thiemann, 2015). Producing updated donkey literature more quickly and at a higher volume may serve as the most effective way to impact donkey healthcare and spread awareness of the issue.

Donkey pharmacology

The most recent literature analysis, published in 2011, on pharmacology and therapeutics for the donkey species reveals that available information remains sparse, especially for such a critical area of healthcare (Grosenbaugh et al., 2011; Mendoza et al., 2019). Since 2002 little expansion of data on donkey pharmaceuticals has been made (Grosenbaugh et al., 2011). Few drugs have been licensed for use in donkeys, and for those that are not licensed clinicians rely

on dosing and interval guidelines produced for horse care (Grosenbaugh et al., 2011; Mendoza et al., 2019). Given that the two species have different metabolisms and fluid balance, relying on horse guidelines for administering drugs to donkeys can be dangerous. Differences in drug bioavailability and how drugs dissolve in the bodies of donkeys and horses increase donkeys' risk of toxicity to some drugs (Grosenbaugh et al., 2011). Drug classes where research needs to be expanded upon include anaesthetics, sedatives, analgesics (nonsteroidal anti-inflammatory drugs [NSAIDs] and opioids), antimicrobial drugs, and anthelmintic drugs (Grosenbaugh et al., 2011; Mendoza et al., 2019). Many of these drugs, such as pain medication, are part of basic supportive care (Thiemann, 2013). This is a central part of the standard regimen of care for the most common conditions that afflict donkeys, such as hyperlipemia and laminitis (Mendoza et al., 2019). These diseases are common in companion donkeys and those used for AAI, raising an area of ethical concern.

Status of donkeys in the United States

The current population of donkeys in the US according to the FAO (2020) is around 53,000, with 16,000 of those being free-roaming through 27 million acres of public land and managed (including welfare assessments, healthcare, capture for adoption by public, etc.) by the Bureau of Land Management (Bureau of Land Management, 2020b). Currently, no studies on the usage and welfare of donkeys in the US have been conducted, only research on free-roaming burros. However, UC Davis has produced a caseload report of donkeys and mules from 2008 through 2017 (Costa et al., 2019). Of the 94,147 equids treated in their clinic, 996 were donkeys and mules (Costa et al., 2019). The data collected in this study provided a narrow scope of donkey welfare in the US as it was limited to those who have had access to the veterinary facility, and donkeys and mules who almost all actively receive medical care. Donkeys and mules travelled to the California institution from as far west as Reno, Nevada, and as far north as Portland, Oregon. 47% of the 575 donkeys came from sanctuaries or were in retirement (Costa et al., 2019). The standard of care for the donkeys visiting the UC Davis facility is likely better than the national average as it is representative of the gold standard of veterinary care for large animals in the US. Most of the donkeys in the study were geriatric, roughly 25% of the donkeys were reported to be overweight (however, 27% of the animals' body condition were not evaluated), and the five most common health problems included:

hoof/orthopaedic, eye, dental and gastrointestinal (alimentary), and skin (Costa et al., 2019). Though, the body condition assessments performed were unreliable and inaccurate as the body conditioning scoring (BCS) scale initially used indicated horse BCS (1 to 9) and was arbitrarily converted to the BCS scale for donkeys (1 to 5). Overall, the study concludes that most participating donkeys received adequate care (Costa et al., 2019). However, the data presented does not provide an accurate assessment of the donkey welfare nationwide. In contrast, the Donkey Sanctuary in the UK has recorded and published data on donkeys entering the sanctuary after completing assessments immediately upon their arrival (Fernandez et al., 2021). The Donkey Sanctuary gives a much more complete picture of donkey welfare in the UK compared to the US and could serve as a guide for future research.

Ethical considerations

Considerations for donkeys employed as companion animals and participants in AAI need to be made. When donkeys are used for AAI, the holes in research and lack of general knowledge by the average donkey guardian negatively impacts donkeys. The guardians of these donkeys have a responsibility to seek the necessary education to ensure the basic health and welfare of the animals under their care. The Five Freedoms encompass the most basic animal welfare principles and should be the minimal standard for donkeys as labourers (OIE, n.d.). All donkeys in the care of humans have the right to the Five Freedoms but the current state of donkey literature and educational resources do not render these attainable for all donkeys, even in well developed areas (OIE, n.d.; Thiemann et al., 2018). In the United States no data has been gathered on the specifics of donkey usage, health, and welfare outside of the free-roaming burro population. In contrast, the Donkey Sanctuary in the United Kingdom produced a report on the welfare of donkeys from 2013 through 2015 of donkeys across the UK under care of guardians (Fernandez et al., 2020). Of the donkeys relinquished to the sanctuary, around 30% were in the overweight to obese weight category; prior to relinquishment 60% had their last farrier visit 12–24 weeks prior when the recommendation is every 6–10 weeks; 43.9% had not received dental care in the year prior to relinquishment; and only 23.2% were fully vaccinated against influenza and tetanus (Fernandez et al., 2021). Considering these statistics, the average donkey likely does not experience all Five Freedoms, particularly Freedom from Pain, Injury, or Disease and Freedom from Fear and Distress (OIE, n.d.).

Currently there exists a comprehensive measurement tool, the Equid Assessment, Research and Scoping (EARS) tool, that can be used to reliably assess the welfare of equids including donkeys (Raw et al., 2020). This tool uses pre-existing, research-based welfare assessment scales combined with new welfare markers to create a comprehensive, objective scale (Raw et al., 2020). The assessment includes 290 questions evaluating 19 welfare indicators, the majority of questions contain pre-determined multiple-choice answers to maintain consistency and objectivity (Raw et al., 2020). However, individuals must be trained on how to use it properly, creating a barrier to widespread adoption of the scale that will take a great amount of time and resources before it can become the worldwide standard (Raw et al., 2020). It could, however, serve as a useful tool to evaluate the welfare of donkeys across nations to help guide future research.

Discussion

Given that much of the existing research has noted that many veterinarians lack knowledge about donkeys, a clear need for the dissemination of educational resources exists (Haines and Goliszek, 2019; Mendoza et al., 2018; Mendoza et al., 2019; Toribio 2019). Ultimately, the most impactful and reliable source of information for donkey guardians could be their veterinary team. Information for donkey guardians should be easily available through search engines, such as Google, to make adequate donkey care more attainable for a larger number of donkey guardians. Donkeys have an inherent right to the Five Freedoms; therefore, humans have a responsibility to work towards developing species-specific information to improve the quality of life of the donkeys they employ (OIE, n.d.).

At the core of the donkey problem lie the historical attitudes that compare the donkey to the horse and leave the donkey lacking in comparison. Illustrating this is the commonly held false narrative that donkeys are lazy and stupid because their behaviour differs from horses, a comparison first documented early in ancient Greek literature (Rossel et al., 2008). But donkeys will never be able to live up to the expectations of horses as they are different species. These comparisons and negative stereotypes have impacted the research on donkeys as companions and participants in AAI. Modern research needs to be conducted considering donkeys without comparisons to horses. Otherthanhuman animals should gain the right to the Five Freedoms the moment they are in the care of humans, not when it is economically

convenient (Camillo et al., 2018). Donkeys are no exception. In the past 20 years donkey research has undeniably flourished, and alongside the research so has an interest in their welfare led by organisations like the Donkey Sanctuary. However, the quality of donkey veterinary care continues to be hindered by under researched topics, such as pharmacology and pathology (Grosenbaugh et al., 2011; Mendoza et al., 2019; Thiemann, 2013). Mclean and Gonzales (2018) suggest researchers should continue to demand that researchers treat donkeys as donkeys, rather than as deficient horses. A social shift in how guardians, caretakers, and the average individual views donkeys will require a higher standard of veterinary knowledge and care as clinicians have the greatest ability to influence treatment and attitudes.

Conclusion

The status of donkey welfare in the United States remains unknown. With the number of resources available to the United States together with the population of donkeys and clear need for research, more awareness of the issue in the scientific community has potential to be a catalyst for change. Researchers have previously recognised a need for better care for donkeys (Burden and Thiemann, 2015; McLean and Gonzalez 2018; Toribio, 2019), but it is important to continue to draw attention to deficient areas of research to keep the conversation and progress moving forward. While growing, the current body of research on donkeys remains unsatisfactory and does not realistically support the basic animal welfare principles, for example, the Five Freedoms (OIE, n.d.). When employing donkeys for companion purposes and in AAI, guardians, caretakers, and organisations should seek state of the art care and advocate for the animals who work for them. In order to accomplish this in locations where donkeys as companions and participants in AAI are common, existing research should be expanded upon and a focus from professionals, especially in the United States, should be placed on generating comprehensive and accessible educational resources. Utilising donkeys for these purposes should be done mindfully in a way that both honours the species and provides care aligning with a high standard of welfare. Clinicians should take current research into careful consideration when caring for donkeys and recognise the genetic and, therefore, inherent physiological differences between the *Equus asinus* and *Equus caballus*.

Author(s) biography and contact details

1 Photo taken by Joseph Sacco, December 2020.

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The Animal Body Multiple: Human-animal relations in scientific animal experiments

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In the following working paper, I outline how the term 'Body Multiple' can be applied to scientific research involving animals. Based on the distinctions between naturalistic and analytic animal body, individual and collective body (the 'animal model') as well as between technical object and epistemic thing, a convergence of physical, conceptual, methodological, and social laboratory animal body can be determined in experimental settings. This convergence in turn affects the interaction and relations between researchers, animal caretakers, and lab animals. Extending the concept of a 'Body Multiple' to research with animals therefore allows to make visible how 'the' laboratory animal is constructed within contemporary scientific research practices. As I will argue, the Animal Body Multiple strengthens the position of animals as ethically significant beings in science while also being of interest for any scientific approach that situates epistemic value within animals or animals' bodies.

Keywords: animal experiments, laboratory animal, animal body multiple, multiple animal-ontologies, epistemic subjects

Introduction

As part of my PhD thesis, I am working on an interdisciplinary research project interested in the relations between researchers, animal caretakers, and otherthanhuman animals (henceforth animals). The qualitative social science project is situated at the intersections of Human-Animal Studies, Science and Technology Studies, and Interaction Theory and aims to analyse how scientific competitiveness, hierarchical organisational structures, juridical developments, activism regarding animal welfare, and emotions towards lab animals intersect and produce ambivalences in human-animal relations within research environments. Methodologically, the research project relies on qualitative interviews that are

being carried out with researchers, Postdocs, PhD students, and animal caretakers from different research groups and within different research fields (e.g., ethology, animal medicine, human medicine and basic research) at the Faculty of Science, the Faculty of Medicine, and the Faculty of Veterinary Medicine at the University of Zurich. The animals used in laboratories, henceforth called 'laboratory animals,' range from insects, birds, fish, mice, and rats to big mammals such as sheep, pigs, and monkeys. The research project is consciously based on an animal-centred perspective, focusing on animal agency within the experiments, co-working processes as well as on the transparency of human communication within the academic hierarchies.

In recent years, many scholars have argued for a paradigm change regarding animal experimentation (see for example the 2019 publication *Animal Experimentation: Working Towards a Paradigm Change*, edited by Kathrin Herrmann and Kimberley Jayne). In addition to focussing on the principles of the 3Rs (replacement, reduction, and refinement of animal experiments) and animal welfare (handling animals with respect, responsibility, and expertise within laboratories), new approaches that analyse human-animal interaction in the laboratory include investigations of the academic structures that dictate funding, publishing and research practices, proposals regarding legislation, the development of new, animal testing-free techniques as well as methods in research, education and training. They therefore make visible how the institutionalised violence that directly affects the laboratory animals' physical integrity can be challenged from different angles – be it an institutional, a juridical, a methodical or a didactic one –, while relying on a thorough assessment of the practical given conditions in contemporary research. For this reason, the hereafter presented research project is dedicated to the current animal experimentation practices in an academic institution. It is thus concerned with the large numbers of animals that are still used for animal experimentation, while the described paradigm change is slowly, but steadily being implemented.

In the following working paper, I outline how the different bodily functions that have been ascribed to laboratory animals within Science and Technology Studies, Sociology, and the History of Medicine, converge in a physical, conceptual, methodological, and social laboratory animal body. Relying on Lesley A. Sharp's suggestion (2019), I term this convergence the Animal Body Multiple, extending Annemarie Mol's concept of the 'Body

Multiple' from its original application in medical practice to animal research. In her publication *The Body Multiple: Ontology in Medical Practice*, Mol (2002) conceptualises the medical object as always being established anew through different practices. Thereby, 'there is manyfoldedness, but not pluralism. […] *the* body (singular) is *multiple* (many)' (Mol, 2002: 84). The convergence of the multiple established bodies, however, does not imply the fragmentation of the medical object (Mol, 2002). On the contrary, the different practices forging the medical object (in Mol's case study Atherosclerosis) allow to make visible how it is handled in medical and scientific practices, since 'attending to the multiplicity of reality is also an *act.* It is something that may be done – or left undone. It is an intervention. It intervenes in the various available styles for describing practices' (2002: 6). Extending Mol's concept to the Animal Body Multiple thus allows to make visible 'the' laboratory animal's function within contemporary scientific research practices.

The research project aims to analyse how researchers and animal caretakers employ the Animal Body Multiple depending on the parameters 'Faculty,' 'Capacity,' and 'Species' in an academic institution. For that purpose, an animal-centred perspective is followed. Starting with the choice of the animal model, the guided interviews cover licensing, breeding, and housing, the animal's transfer into an experimental setting, the concrete experimental methods, naming practices, applied concepts of animal welfare as well as social interactions with the animals. By coding the researchers' and caretakers' arguments, faculty-, capacity-, and species-specific practices of invoking the Animal Body Multiple can be carved out. Additionally, the laboratory animals' influence on processes in which they are not involved on an institutionally visible level can be traced. As I will argue, an animal-centred perspective is thus not only compulsory for questions regarding laboratory animal welfare but crucial for understanding institutional quality management and teamwork within animal experiments as well. The following theoretical framework that outlines the Animal Body Multiple is thus of interest for any scientific approach that situates epistemic value within animals or animals' bodies, while it also strengthens the position of animals as ethically significant beings in science.

The Animal Body Multiple

The definition of an animal experiment and subsequently 'the' laboratory animal are shaped by historical and contemporary scientific practices, legal regulations, as well as political and ethical discourses about animals. Consequently, as Alex Hüntelmann notes, the laboratory animal is defined by the attribution of certain characteristics, requirements and functions, while these attributions – just like the experiment and animal-human relations – are influenced by historical change (cf. 2016: 160). To provide a theoretical definition of 'the' laboratory animal, Roland Borgards (2010) compares an empiricist position, which regards the laboratory animal as a given object, with a constructivist position, which views the animal as a manufactured object . Therefore, if the laboratory animal is bred in the laboratory, it is simultaneously experimental material and experimental product (cf. Borgards 2010: 346). However, if the laboratory animal is partially an imaginary and/or produced artefact, Borgards argues, then the question arises whether the laboratory animal is simultaneously object, agent, and product of animal experimentation (cf. 2010: 346).

According to historian of science Hans-Jörg Rheinberger, however, the supposedly 'natural' scientific object emerges always only in the process of research (cf. 1994: 408). Correspondingly, the laboratory animal, notes Michael E. Lynch, can be differentiated into the 'analytic animal' and the 'naturalistic animal' (1988: 267–268). While the naturalistic animal body corresponds with the 'animal in ordinary perception and interaction', the analytic animal is 'a product of laboratory activities': When entering the laboratory space, the naturalistic animal body is transformed into an analytic body and thereby into a scientific object in a prevalent system of specific conditions (1988: 267). As Lynch states, '[t]he 'analytic animal' becomes the *real* animal in a scientific system of knowledge, while tacitly depending upon the 'naturalistic animal' for its practical foundation' (1988: 267).

The conversion of the naturalistic animal into an analytical one requires a multistage transformation process and is primarily dependent on the laboratory animal's 'suitability' for life in the laboratory: As Böhnert et al. note, in addition to generally favourable characteristics such as low food requirements, great ecological tolerance, or high reproductive rate, there are specific requirements arising from particular research questions, historical research traditions and the use of specific experimental systems (cf. 2016: 11). It is thus predominantly economical and practical criteria which influence the selection of the laboratory animal. The

problematic nature of transforming a naturalistic animal into an analytic animal is apparent: As an analytic body, the laboratory animal is reified to function as an epistemic research object. This reification in turn is dependent on the naturalistic animal body, which produces an ambivalent simultaneity of living being and research object.

Rheinberger distinguishes between two different elements within experimental systems: 'epistemic things' on the one hand and 'technical objects' on the other hand (1997: 28–29). In the research process, Rheinberger notes, technical objects such as 'instruments, inscription devices, model organisms and the floating theorems or boundary concepts attached to them' serve to stabilise the experimental system and operationally redefine the epistemic thing, as they enable the scientific object to be embedded in a set of practices and technical conditions in specific institutional contexts (1997: 29). This is significant due to epistemic things being characterised by an 'irreducible vagueness,' that makes them objects of epistemic interest in the first place (Rheinberger, 1997: 28). Epistemic things, in contrast to technical objects, are therefore characterised by a fleetingness that requires their transformation into a form of visibility or reification, for example as a preparation, as a model, or as a simulation (cf. Rheinberger, 2014: 195–196). According to Rheinberger, laboratory animals are to be considered as technical objects, named in line with the 'supply of materials,' 'research traditions' or 'accumulated skills' that serve to stabilise epistemic things (1997: 29). With reference to Lynch (1988), however, it is only the analytic animal body that serves as a stabilising entity, while the naturalistic animal body partially remains an uncertain variable in need of conversion. At this point, the question thus arises as to how epistemic things and technical objects relate to a certain liveness: When thinking of laboratory animals as living 'epistemic things' or living 'technical objects', both are characterised by a vulnerability and unpredictability not necessarily associated with stabilising techniques in experimental systems. The ambivalent simultaneity of living being and research object is thus only reinforced.

Additionally, the epistemic interest in the laboratory animal is not based on its individuality but arises from its belonging to an animal model. The laboratory animal is therefore always a model organism – a *sample* organism – of a specific animal model, that, in Rheinberger's dualistic division, serves as a component of the epistemic thing (cf. 2014: 196). In a majority of animal experiments, the animal model is used to model human conditions –

for example in the form of an abstraction (when results obtained from animal bodies are generalised), a representation (when the animals serve as a proxy for humans) or a transfer (when the conclusions are transferred from animals to humans) (cf. Borgards 2010: 349). This leads to a renewed multiplicity of the laboratory animal, which on the one hand always represents an individual being and on the other hand serves as a representative of a specific species, subspecies, or genotype (cf. Angerer 2013: 132) – and, in many cases, as a model for human conditions.

Due to the simultaneity of a multiple individual (analytic and naturalistic) body and a singular collective (model) body, the laboratory animal is thus both a technical and an epistemic thing: On the one hand, it stabilises a collective body (the animal model) as an individual. On the other hand, as part of an epistemic thing, it must be stabilised and objectified by techniques in order to be able to produce data for the animal model in the first place. Thus, laboratory animals become inherently contradictory, 'natural-technical' subjects (Haraway, 1989: 108): they are both living matter and objectified research objects, consisting of several individual bodies while at the same time representing a sample of a collective animal and/or human model body. The doubling of individual and collective animal body accounts for my terminological adherence to the term 'Body Multiple,' while Lesley A. Sharp uses the term 'animal "multiple"' (2019: 18) or even a species-specific term, such as 'a "monkey multiple"' (2019: 125). By not adhering to the bodily multiplicity, I argue, the distinction between individual and collective animal body (the animal model) gets lost in the process.

Finally, and to complicate the quest of defining the Animal Body Multiple even more, the laboratory animal is not only to be considered as part of an epistemic thing or technical object, but as an interacting being in a social structure of experiment leaders, experimenters and animal caretakers within the laboratory space. Humanimal sociality, as Rainer Wiedenmann notes, is shaped by 'structural ambivalence,' because it involves two forms of human-animal relationships: on the one hand, humans communicate with animals; on the other hand, they communicate with each other through and via animals (2009: 81). Animals therefore not only function as signs for human interpersonal communication, they also produce and decipher signs themselves – when laboratory rodents, for example, serve as

symbols of scientific success (e.g., the *Monument to the laboratory mouse* in Novosibirsk, Russia).

Wiedenmann distinguishes between primary social intentions, which capture an animal in a socially immediate face-to-face situation and between secondary social intentions that function indirectly and define the animal as a bearer of meanings and attributions that can be institutionalised as well as privatised (2009: 83–84). Those primary and secondary social intentions are closely intertwined (cf. Wiedenmann, 2009: 85) and exponentially heightened in the case of laboratory animals, since the laboratory animal body, as has been argued, carries a various number of different attributions. By assuming a relational form of agency, the animal's agency and human-animal relations in animal experiments can thus be put into a new perspective: The laboratory animal takes on different social roles within research environments (cf. Roscher, 2018: 94), which vary depending on the researcher/caretaker and that individual person's understanding of the laboratory animal. If knowledge about animals is socially pre-structured, as Seeliger argues, animals are thus instances through which a multi-level model of the interaction between social structures and situational contexts of action becomes apparent (cf. 2015: 30). Consequently, notes Melanie Bujok, the laboratory animal is simultaneously a bodily subject, a reified commodity, a material artefact, and a symbol of scientific success, thereby always producing a simultaneity of inclusion and exclusion, of perception and misrecognition as well as presence and absence of opponent and thing (cf. 2015: 109–110).

Additionally, the laboratory animal is not only part of social interactions, but of experimental interaction as well. According to actor-network theory, which formulates a critique of the traditional understanding of actors acting in stable spaces by defining space and time as interconnected in materiality and through events, experimental interaction can be located between all protagonists of an animal experiment (cf. Wieser, 2008: 427). This means firstly that actors 'emerge from a fluid process of interaction between various (human and non-human) components' (Taylor, 2011: 275). Secondly, both material objects and nonhuman 'objects' of research are ascribed agency insofar as they contain interaction potential (cf. Wieser, 2008: 424). According to Bruno Latour, thereby, in addition to intersubjectivity, an 'interobjectivity' becomes conceivable, which is rooted in the 'shifting out of an individual actor as well as the knitting together of interactions' (1996: 240). Via a

focus on interactive research practices, science can thus be portrayed as a performative process. If importance is attached to scientific technologies and research objects (Pickering, 1995), a differentiation must again be made with regard to the determination of living objects in experimental systems: The experimental animal, as a naturalistic and analytical body as well as part 'epistemic thing' and part 'technical object', is then equally affected by social and experimental interaction.

In short, then, the laboratory animal embodies a variety of different functions at once: as naturalistic and analytic body, as epistemic thing and technical object, as part individual and part model body as well as a body affected by social and experimental interaction. Experimental animals, as I will argue, are therefore neither epistemic things nor objects of knowledge or technical objects, but epistemic subjects and technical subjects all in one. 'The' laboratory animal, simultaneously test material and test product, subject and object of knowledge production, primarily represents what Annemarie Mol terms the 'Body Multiple': Laboratory animals are always being established anew through different practices, while the manyfoldedness of the described laboratory animal bodies ultimately does not imply the fragmentation of the animal itself. On the contrary, the different animal bodies allow to make visible how 'the' laboratory animal is handled in and constructed through scientific practices. With its contradictory design, the Animal Body Multiple is thus uniquely able to illustrate contemporary experimental cultures and scientific practices in their functioning and interdependence. As I will explain in the following paragraph, the concept is particularly useful to highlight the colliding animal-ontologies present in scientific animal experiments. An animal-centred perspective is thus of utmost importance when analysing human-animal relations within research environments.

Incompatible animal-ontologies in animal experiments

When inquiring the relations between humans and laboratory animals, various current influencing factors come into view that emerge in the 'outside space' of the laboratory and influence the interaction between humans and laboratory animals through exchange processes. These include changing concepts of 'nature', the anthropological difference, animal sociality, and newly negotiated moral and ethical standards regarding animals. On the one hand, these factors indirectly influence how laboratory animals are used within the

'laboratory interior', and therefore, which animal models are selected, how animal welfare is applied, and which abilities are attributed to the animals. On the other hand, it is precisely these experiments that expand and challenge concepts of 'nature', the anthropological difference, or ethical and juridical arguments, for instance, in the context of transgenic animal breeding, alternative research methods or a problematised animal to human transferability regarding the results.

These constant feedback effects between the inner and outer space of knowledge production have a particular impact on the relationship between humans and laboratory animals. Lynda Birke et al. contend:

> Laboratory staff must learn to accept being at once part of mainstream culture, with its complex and multi-layered beliefs and representations of animals in nature (which also shapes identities) and at the same time being part of the scientific culture, in which animals are transformed into objects (2007: 11).

Consequently, Birke et al. suggest, scientists learn to distinguish different kinds of 'animals':

> [S]cientists, in their training, must learn to separate two understandings of "animal". One kind is emotionally distanced, the laboratory artifact, produced and reproduced through standardized protocols and styles of writing. The other is the kind of animal that scientists might have at home or be familiar with in other contexts, a kind of animal with whom to have an emotional connection. It is that sense of animal, and connection, which is embedded in much laboratory tacit knowledge and appears in everyday chat around the laboratory (2007: 59).

As Birke et al. note, the distinction between different conceptions of the laboratory animal – what I term the Animal Body Multiple – not only pre-structures ambivalences in dealing with the laboratory animal, it also highlights how the convergence of the laboratory animal's physical, conceptual, methodological and social body affects the interaction and relationships

between researchers, animal caretakers, and laboratory animals. Thereby, 'the' laboratory animal embodies different layers of cultural and social practices that can vary in between research teams, research areas and academic faculties, while in fact only the multi-layered system – the Animal Body Multiple – serves as a ''model' for human clinical practice' (Birke et al. 2007: 53).

However, this does not mean that there are no individualised relationships with laboratory animals, on the contrary: In contrast to the written formalities of publications, according to Birke et al., verbal reference is made to the individual personality of laboratory animals, to their emotions or to their trainability and influence on the experiment (2007: 44). Laboratory animals are thereby 'destandardized' and (re)transformed into individual, naturalistic animals (Birke et al. 2007: 44). Similarly, the laboratory animals affect the researchers' identities and interests, for example when codes and in-groups like the 'fly people' or the 'mouse people' are formed (Birke et al. 2007: 22). This multi-layered treatment of the laboratory animal within the poles of standardisation and individualisation is capable of destabilising animal experimentation altogether:

> Such interventions, then, entail a dance between ever greater standardization of the animals (its current apotheosis being transgenics), and the chronically nonstandard ways in which animals are made standard through care and individualization. Within such interventions are folded other models of the laboratory rodent: as tool and as naturalistic animal. It is that ambiguity that facilitates the unease many lab workers voice about using animals; for all that standardization and control underlie scientific experiments, variability creeps in and brings with it an animal much closer to the naturalistic. The animal is harder to categorize as a tool of the trade (Birke et al. 2007, 54).

Therefore, it is not only the overlaps of the laboratory animals' multiple individual and the singular collective body that determines the relationship between humans and laboratory animals in animal experimentation, but discrepancies between a scientific and everyday understanding of animals. The highly variable and individual forms of human-animal relations

within animal experiments thus lend themselves to an analysis of experimental systems and knowledge cultures from an animal-centred perspective. Laboratory animals can thereby make visible both the interdependencies within an experimental system and the prevailing cultures of knowledge by acting as central pivots of experimental location, practice, interaction, epistemic interest, technical requirements, documentation, publication, and narratives at work in science. However, this pivotal function of the Animal Body Multiple is rarely documented institutionally and processually because it destabilises reason-based logic and objectivity-related regulation in equal measure.

An animal-centred view thus allows to make the Animal Body Multiple visible in its hybridity and ambivalence by working out the researchers' and animal caretakers' argumentative links, structures, and practises. As Karin Knorr-Cetina notes, this ambivalence stems from a coexistence of different ontologies and orders, namely that of the animal familiar known and protected from everyday life and that of the production cycle, in which efficiency and productivity maximisation are paramount (cf. 1994: 111). Consequently, it can be assumed that in animal experimentation, multiple contradictory animal ontologies emerge. As mentioned above, they are on the one hand grounded in temporality, place, and discursive practices in the 'outside' of the laboratory and on the other hand only come to be in the simultaneity of a 'placelessness' and the strictly localised know-how of the laboratory (Kohler, 2002: 473). These multiple animal ontologies can thus be aligned with the concurrence of naturalistic and analytic laboratory animal body, of technical object and epistemic subject, and of individual and collective body that is interactively produced to form the Animal Body Multiple.

However, the coexisting ontologies present in the Animal Body Multiple are not only highly ambivalent, but partially incompatible. By colliding, the multiple animal ontologies create frictions within the experimental setting that influence research practices, labour division, and human-animal interactions. A prime example of colliding animal ontologies is the killing of the laboratory animal within an experimental setting: While the naturalistic animal has to be transferred into an analytic animal – an 'extended domain of temporal, spatial and human significations' (Lynch, 1988: 274) –, the individual animal body is still part of a collective animal model body. Nevertheless, the killing of the individual animal is emotionally and physically taxing, leading to human-animal distancing processes that rely on

spatial, social, and hierarchical divisions within the laboratory. Thereby, as the research project would like to show, not only animal-related topics of interest come to attention, but also practices of human communication or academic division of labour – processes, in which the laboratory animals are seemingly not involved on an institutional level. An animal-centred perspective is consequently able to illustrate the Animal Body Multiple that forges 'the' laboratory animal within an experimental setting, while subsequently highlighting the various different animal ontologies that are at play within animal experiments.

Aims of the social-science project on *Human-Animal Relations in Scientific Animal Experiments*

The qualitative social science study *Human-Animal Relations in Scientific Animal Experiments at the University of Zurich* aims to highlight the central function of the Animal Body Multiple for research with animals and is therefore directed from an animal-centred perspective. The interview guide consists of questions that ask about selection criteria regarding the animal model and species, the laboratory animal's abilities, the number of people in contact with the animals, and the concrete laboratory practices performed on and with the animals. Therein, a specific focus lies on labour division and communication strategies regarding emotions towards or relations with the animals. In the following, I summarise the aims of the research project and its use of the Animal Body Multiple-concept. When working hypotheses are stated below, they stem from the pilot study conducted in 2019.

The aim of the qualitative science project is firstly to derive certain practice-oriented definitions, of what constitutes a contemporary animal experiment, a laboratory animal, and the animal's 'dignity' (*Würde*) – which is a term solely used in Swiss animal law – and to analyse how researchers and animal caretakers rely on the Animal Body Multiple for their argumentation. As shown in the pilot study, researchers and animal caretakers rely on a different set of defining practices, for example, methodological definitions, goal-oriented definitions, juridical definitions, animal centred and non-animal centred definitions as well as subjectivising and objectivising definitions. Thereby, differences regarding the animal species, the academic faculty as well as the capacity within research teams come into play. Furthermore, it can be shown in which cases researchers rely alternately on the individual animal or the collective animal body (the animal model) for their argument. Additionally,

comparisons can be drawn between research projects that are using the same species but are located at different faculties and in different research areas.

Secondly, the project aims to investigate the different relations with laboratory animals. A working hypothesis resulting from the pilot study is that relations with laboratory animals depend very much on capacity and faculty. Interestingly, the relations with laboratory animals are less conditioned by the respective animal species: In the pilot study, care, interest, and emotions were verbalised towards amphibians or birds just as much as towards sheep or monkeys. When asked whether closer human-animal relations are productive for animal experiments, the majority of researchers interviewed in the pilot study answered in the affirmative. Reasons cited included being able to better assess the animal, causing less stress to the animal and reducing animal numbers. Additionally, it was said that the validity of the scientific work benefits from having better knowledge about the animal's behaviour and handling. However, these statements stand in contrast to applied distancing processes, the minimal communication about emotions as well as the minimal involvement of animal caretakers in research activities.

Thirdly, the research project aims to analyse the laboratory animals' agency within experiments. As shown in the pilot study, forms of agency in animal experiments can be divided into contribution through freedom of action (the animal's freedom of action is used for scientific knowledge gain), a contribution through planned cognitive activity (the animal's cognitive activity is used for scientific knowledge gain), a contribution through planned physiological activity (the animal's physiological processes are used for knowledge gain), and contribution through physiological passivity (the fixed, narcotised or dead animal body is used for scientific knowledge gain). This distinction allows to better understand whether the naturalistic animal body and behaviour are relevant to the experiment. Again, a possible agency within the experiments in no way negates the violation of laboratory animals' freedom of action and physical integrity – but, as I would argue, understanding how the Animal Body Multiple is applied within research settings facilitates the application of animal welfare and animal ethics.

Accordingly, a fourth aim of the project is to code the references to animal welfare and animal ethics, for which capacity (e.g., researcher, PhD-student, animal caretaker) and/ or scientific background (e.g., veterinary medicine, human medicine, natural sciences) can be

influential. As shown in the pilot study, animal welfare and animal-based assessment are more often considered by researchers from the subfield of behavioural science and with a veterinary background, as well as by animal caretakers – regardless of the animal species. This also relates to the question of which people spend the most time with the laboratory animals and whether they are involved in the development of future research projects, housing, and animal welfare.

Finally, a fifth objective aims to make visible how the laboratory animals influence certain discourses and institutional decisions, even if they are only part of the argumentation via secondary connections. For example, emotions toward laboratory animals are usually discussed only in private (non-institutionalised) contexts, although researchers consider close human-animal relations as productive for their work (see aim number two). Similarly, forms of emotional distancing influence, for example, the naming and labelling of laboratory animals, the outsourcing of certain activities, such as the breeding or killing of the animal, and a division of labour relying heavily on hierarchical academic orders. If the discourse on emotions toward laboratory animals is not conducted at an institutional level, it therefore tends to amplify a hierarchical division of labour (e.g., the task of killing the animal is passed down the academic hierarchical order). If the treatment of laboratory animals affects workflow and institutional planning, the question arises, in turn, as to whether emotions regarding the animals should be addressed publicly and within the context of capacity and collaboration. All in all, the project therefore aims to make visible how the Animal Body Multiple is referred to and applied within a specific experimental culture and with regards to faculty, capacity, and animal species. Likewise, the project aims to show how different animal ontologies intersect and impact emotional distancing, labour division, and animal welfare. By focussing on the large numbers of animals that are still used for animal experimentation, the research project therefore calls attention to the contemporary research practices with animals in an academic institution. Because of its widely applied focus on research practices – from ethology to animal medicine to the natural sciences – its results are of relevance for the ongoing paradigm change regarding animal experiments as well, since they imply the importance of a focus on organisational teamwork and capacity, rather than on juridical restrictions and species-specific animal welfare.

Conclusion

To sum up, the laboratory Animal Body Multiple encompasses the convergence of a physical, conceptual, methodological, and social body that has great potential for the study of experimental and knowledge cultures precisely because of its 'tailoring'. As has been shown, by choosing an animal-centred perspective for the qualitative social science research project, the practices that constitute the Animal Body Multiple can be analysed, highlighting how multiple animal ontologies are interconnected within animal experiments and through the relations in between the laboratory animals, the researchers, and the animal caretakers. An animal-centred perspective is therefore not only compulsory for questions regarding animal ethics and animal welfare, but crucial for the examination of human-animal interaction and institutional quality management of contemporary animal experiments as well, as it allows the elaboration of argumentative connections between processes in which the laboratory animal may not be involved on an institutionally visible level.

The Animal Body Multiple therefore complicates binary distinctions of presence and absence, subject, and object, bodily being and epistemic object, while any reduction on a specific part of the Animal Body Multiple – be it the analytic, the social, or the naturalistic body – in turn denies the dynamic and contradictory processes that are at present in animal experiments. In turn, the practices that constitute the Animal Body Multiple allow for a reconceptualisation of knowledge about human science, scientific cultures, and experimental systems. This knowledge is pivotal not only for animal welfare, but for the implementation of the above-mentioned paradigm change regarding animal experimentation. The theoretical framework presented, therefore, aims to strengthen the position of animals as ethically significant beings in science by pointing out their potential for gaining knowledge about research processes and scientific practices, which in turn allow to make visible the colliding methodical, juridical, academic, and didactic orders of animal experimentation. In addition to the laboratory animals, the Animal Body Multiple may thus be of interest for any scientific approach that situates epistemic value within animals or animals' bodies.

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Liminal beings: On anthrozoologists and elephants

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As an interdisciplinary field, anthrozoology is concerned with the myriad of interactions between humans and other animals. However, anthrozoology's very interdisciplinarity can lead to difficulties fitting neatly into other more established academic fields or finding journals in which to publish. The author's journey through anthrozoological fieldwork, working closely with elephants employed in the tourism industry, led to feelings of liminality—as if she was existing in the spaces between academic fields, between nations and between owners, elephants, and advocates in Nepal. Elephants participating in fieldwork for this study also appeared to reside in a liminal space. Working as tourist conveyances, these elephants were alternatingly viewed as owned commodities, deities, abused servants, and endangered species. The tensions that exist between the historical roles of anthrozoologists, elephant owners, and elephants serve to illustrate the liminality of both researchers and research participants.

Keywords: anthrozoology, captive, elephants, liminality, multispecies, Nepal, rites of passage

Introduction

While on a jeep safari through Chitwan National Park in Nepal, I heard the guide from the vehicle ahead yell something back to us. I turned to our guide and asked what was said. 'Porcupine,' our guide explained. I was thrilled! I had never seen a porcupine in the wild, and as the jeep stopped my companions and I jumped out to join the rest of our group. As I drew near to the rest of them, one woman whispered, 'Stay close.' I was confused. 'Are the porcupines in Nepal dangerous?' I whispered. 'Porcupine?' she said, 'It's a cobra!' I looked at the ground in front of me, and saw it was riddled with snake holes. I turned to another travelling companion and without needing to speak a word we backed up together until we

reached our jeep and climbed aboard. We later discovered that the guide in front had yelled back a word—in Nepali—which sounds a lot like 'porcupine' in English. For some reason, our Nepalese guide 'heard' in English instead of Nepali. From that day on, my companions and I yell 'porcupine!' in any potentially dangerous situation.

I initially included the above story as the introduction to my PhD thesis as a demonstration of the myriad of ways words change their meaning dependent both upon the situation and the speaker (Mol, 2014). However, the story also serves to illustrate how two animals—a porcupine and a cobra—became inexorably linked into a kind of hybrid being. This mammal-reptile is a liminal creature, found on the threshold between the past and the present, suspended between Nepal and the US, between language and reality. She exists both as a warning of potential physical danger arising from miscommunication and an amusing anecdote which creates a bridge between human (*Homo sapiens*)[1] companions from vastly different backgrounds.

Concepts of liminality are found in a wide range of disciplines, but have their roots in anthropology, originating with ethnographer van Gennep in the early 1900s. His work on human 'rites of passage' focused on defining human life as a series of both physical (birth, puberty, death) and socially influenced (marriage, education, work promotion) transitions (Kertzer, 2013: vii; van Gennep, 1960). These rites of passage place one on the *limina*, or threshold, between the ending of one role and the beginning of another. Van Gennep also applied the term to those finding themselves in liminal societal or physical roles, for example, engaged couples, pregnant women, or novitiate nuns (van Gennep, 1960).

For many, being liminal is an undesirable state of being. One may feel caught in a 'precarious phase between stable states' or be 'set apart from society,' creating a sense of loss, lack of control over one's life, or feelings of alienation (Skjoldager-Nielsen and Edelman, 2014). For example, a young woman facing expulsion from her childhood mixed-sex peer group and temporary relocation to a menstruation tent as she approaches puberty may mourn her loss of childhood freedom. She may be resistant to the gender-specific roles which await her in adulthood. Likewise, liminality might inspire feelings of growth and positivity, for

[1] It feels speciesist to the author that she must include binomial nomenclature for each otherthanhuman animal type at first use, but there is no such tradition for the identification of humans. Let us begin one in order to level the playing field.

example as one awaits their eligibility to undergo rites of passage into adulthood which result in new (and presumably greater) responsibilities and rights.

Likewise, the field of anthrozoology — and myself within it — exists in liminal spaces which may, at first, seem undesirable. We rely upon both situationally and socially dependent definitions of our identity, and these definitions are emerging and changing as the field matures. Anthrozoology is a reflective and interdisciplinary[2] practice which draws from a variety of academic fields, including history, psychology, zoology, veterinary medicine, behaviour, linguistics, anthropology, and law (Herzog, 2016; Szydlowski, 2021a). It is the use of reflective subjectivity, according to Turner (1979: 115), which pushes one toward liminality. Practicing anthrozoologists, therefore, may find themselves functioning in the spaces *between* academic fields and taxonomic classifications as they examine humankind's complex emotions toward, and relationships with, otherthanhuman animals (henceforth OTHanimals). Occupying these threshold areas may create a sense of exclusion from one's larger community; in the case of anthrozoologists, exclusion from publication in limited focus journals, discipline-specific professional societies, and even opportunities for careers at academic institutions.[3] Perhaps because we are liminal beings ourselves, anthrozoologists may be especially drawn to those OTHanimals who are also caught in the in-between spaces, as I am to captive Asian elephants in Nepal (*Elephas maximus*, henceforth elephants).

Over the past decade, I have examined the relationships between elephants and humans in Nepal. During the period between 2017 and 2019, I focused on surveys from 30 conservation-focused ecotourists and interns travelling with an American organisation. These surveys were conducted alongside more than 80 interviews with Nepalese community members, mahouts, elephant owners, NGO personnel, and other stakeholders. Surveys and interviews were supplemented with participatory action research (PAR) undertaken among humans, organisations, and approximately 80 elephants. I was repeatedly struck by the inconsistency with which people from a variety of countries and backgrounds described both elephants and anthrozoologists, and the incongruous reactions of these pachyderms (and myself) to the humans they encountered. This paper examines the ways in which captive

[2] Arguments could be made that it is a transdisciplinary field, but I disagree. If it were, it seems there would be no 'spaces' or 'thresholds' between disciplines.
[3] Anthrozoology-specific programmes in which to teach are few and far between. See animalsandsociety.org 'degree programs' for examples.

elephants, elephant owners, and anthrozoologists represent liminal beings who do not quite fit into traditional or socially defined roles. This paper is part autobiography, a bit ethnography, a little ethology, and perhaps a slight critique of the discipline. These methods allow me to reflexively consider my data, which has long been an important tool for scholarly rigour since the early days of social science (see Davies, 2012; Firestone and Dawson, 1982; Hurn, 2010; Mead and Morris, 1934). Through a reflexive examination of my background and experiences working with elephants in Nepal, I will discuss how anthrozoologists, pachyderms, and other stakeholders find themselves cast into literal and metaphorical lacunae.

Part one: elephants as liminal beings

Van Dooren eloquently describes OTHanimals not only as 'fleeting and fragile individual' beings, but also as members of 'vast evolutionary lineages'[4] (2014: 22). Captive elephants in Nepal are often documented as the latter, generalised throughout their history in Southeast Asia as a platoon of living tanks or hunting mounts (Locke, 2009; Mishra, 2008), as representatives of human passions in literature (Ramanathapillai, 2009), as Hindu and Buddhist religious icons (Kharel, 2002: np; Ramanathapillai, 2009), as a charismatic species around which conservationists and funding can be mobilised (Barua, 2014; Chaudhari, 2017; Menon and Tawari, 2019; Sukumar, 2006), and as animate jeeps serving to ferry tourists into the jungle (Szydlowski, 2021b).

Allow me to coin a neologism for use in this paper. As I described my elephant participants and human-elephant interactions to students, colleagues, and family, I was met with confusion as I referred to the pachyderms and other interlocutors equally as 'people' or via he/she pronouns. I was unwilling to refer to elephants simply as 'animals', or to humans in ways that would seemingly indicate they were the only sentient species participating in my fieldwork. My audience was utterly unable to determine which species I was referring to in any given story, which may be thanks in part to what Pennycook describes as the 'politics of the pronoun' (1994: 175). Pronouns always imply 'relations of power' (Pennycook, 1994: 175; Riggs and Peel, 2016) when used to name oneself or other humans, and I would argue that

[4] I suspect the same description could apply to anthrozoologists.

the power relations are even more pronounced when naming nonhuman persons. The thought that elephant persons cannot or should not be adequately identified via pronoun, or that only humans deserve pronouns is another problematic topic which may be related to human exceptionalism (Riggs and Peel, 2016) or the idea that to use a personal pronoun for an elephant is only appropriate if she has been thoroughly anthropomorphised (Brown, 2017: 13). This 'struggle over representation' is seen in debates surrounding all pronouns and is often used to create social others (for 'us' to be us, there must be a 'them') (Pennycook, 1994: 176; Stibbe, 2012: 24). Instead, I was acknowledging the personhood of all participants in the hopes of 'de-othering' individuals. Thus, elephants became 'pachyderm persons' in my conversations, and I will continue to use the term here as a nod to the common need in both biological and social science articles to (repeatedly) identify to their audience that humans are, in fact, animals. Currently, many anthrozoological works include a 'disclaimer' regarding the use of terms throughout (see Fenton, 2019; Hill et al. 2022; Hurn and Badman-King, 2019; Wuensch et al. 2002 for a few examples). This desire to defend our choices is felt by anthrozoologists who struggle to find a term which does not rely upon what OTHanimals are lacking ('other' animals or 'nonhuman primates', for example), or is unwieldly (such as morethanhuman). Furthermore, my use of this term is a nod to Piers Locke's discussions of 'elephants as persons' (2017: 354) and is an acknowledgement of the need to provide 'personal' details of individual elephant lives to help counteract their ongoing global commodification (see Garrison, 2008; Malchrowicz-Mosko, et al., 2020; Szydlowski, 2021b).

Figure 1: Human and pachyderm persons in a typical Nepalese stable. Photo taken by the author in Sauraha, Nepal

Defining elephants and the elephant-human relationship

Captive pachyderm persons in Nepal occupy a strange space, at first glance defined by what they are not—not wild, not domesticated, not livestock, not free, not protected by law or societal norms (see Szydlowski, 2021b). These elephants exist instead in the spaces between the above descriptors. In contrast, wild elephants in Nepal are defined by what they *are* — members of a heavily protected endangered species who are rapidly disappearing from landscapes (Government of Nepal, 2009; Menon and Tawari, 2019; Yadav, et.al 2015). Wild elephants are protected by a number of regulations instituted by the government and by CITES treaties which make removing them from the wild within Nepal, and their trade across international borders, illegal (CITES, 1973; Government of Nepal, 2009: np). Captive elephants have no such legal protection, or even basic rights, once they arrive in Sauraha (Kharel, 2002). Occupying the spaces between wild and domesticated beings, between protected endangered species and livestock, leaves these captive individuals exposed; the risk associated with liminality is higher for these elephants than for the anthrozoologist studying them. They face a lack of protection based upon their neither/nor status. While the anthrozoologist chose to pursue an emergent field, selected the country of research focus,

and chose to be present in the stables of Nepal, the privately held elephants did not choose their affiliation with humans nor their stablemates.[5] Rather they were wild caught and transported without their consent to a new stable and herd, or sired by wild bulls and born into captivity at the breeding centre.[6]

Piers Locke described the human and elephant relationship in Nepal as one in which 'neither species can retain the upper hand' (2016: 5). This constant tension can be observed in the interactions between humans and elephants as they cohabitate, co-work, and co-exist. For the most part, these daily interactions appear benign. Mahouts and elephants move around the stable in a dance of eating and feeding, cleaning and soiling, resting and working. There is a rhythm to life in these private stables, up early for breakfast, get dressed (in the case of elephants in a heavy *howdah*—a wooden platform upon which human guests can ride), commute to work, jungle safaris, commute home for dinner. However, the dynamic changes when the elephant half of the equation desires more freedom than their employer or manager allows. For example, mahout interlocuters regularly explained that they must continually dominate these elephants for the safety of tourists, even if that means beating them with sticks or fists. In return, elephants demonstrated their desire to escape this domination through a variety of actions which ranged from silent refusal to perform their duties when 'requested' to occasional attacks on humans. These complex mahout-elephant relationships have been the subject of academic literature (see Hart, 2005; Hart and Locke, 2007; Locke, 2017), but rarely are the pachyderms themselves studied as autonomous beings worthy of equal consideration.

Elephants and their 'owners'

The pachyderm persons encountered in my fieldwork live in stables behind hotels or in lots surrounding the bustling town of Sauraha, Nepal. This small town serves as the primary tourism hub for Chitwan National Park, the busiest protected area in the country (Government of Nepal, 2015). These pachyderm persons are employed in careers chosen for them by others, much like humans who find themselves forced to accept a less than suitable

[5] Although, in the case of this anthrozoologist, assent for participation was requested and received from elephant interlocuters prior to the beginning of her study (Szydlowski, 2022).
[6] A discussion of the 'breaking' process, which is undertaken to ensure the 'usability' of captive elephants is vitally important but beyond the scope of this paper. Please see Szydlowski, 2021b.

job based upon the financial or social situation in which they currently reside (Coulter, 2016). For these elephants, it often means experiencing capture from the wild in India and transport to Nepal for 'employment' with and among humans (AS, Bames, Brown, Renee interviews, 2019; Government of Nepal, 2009). This rite of passage from wild to captive is one way in which elephants become liminal beings.[7]

These elephants are surrounded by ongoing debates about both their identities and their presence in the area. These identities are derived from their interactions with a variety of human stakeholders. For example, during fieldwork, owners and mahouts spoke of elephants as property — a living all-terrain vehicle used to ferry tourists into the jungle. Owners felt they provided enough basic maintenance via a provisioned diet and mahout care to keep these pachyderm-jeeps going season after season. At first glance, it appeared that elephants were simply mistreated equipment used and abused until they no longer worked. But like most OTHanimal-human relationships, the situation is much more nuanced than it first appeared. For example, owners and mahouts also described their elephants as 'family members', spoke of their 'love' for individuals, and their commitment to keeping human-elephant relationships alive (BC, OR, AS, Vachan interviews, 2019). The owners saw themselves as liminal beings — on the threshold between the societal need to 'be big' (aka rich or famous) and tasked with responsibility for the expensive care of a massive, god-like creature. These owners felt trapped between conflicting societal demands: some community members protested in the hope of ending all elephant use while others flocked to town to experience elephant-safari.

Owners and veterinary staff expressed concern that if private elephant-backed safaris ended, there would 'be no elephants left in Sauraha', as no one would be able to afford to feed and house them (AS, 2019). 'Who will my parents visit when they come to town if the elephants are all gone?' one asked (AS, 2019). Older generations, he explained, wish to pay their respects to Ganesh via captive pachyderm persons. If private ownership and elephant-backed safaris end, he explained, so would the ability to 'see elephants', and thus Ganesh, up close (AS, 2019).

[7] It is important to note that this paper discusses only privately-owned captive elephants, and not those found in Government or National Trust for Nature Conservation stables. Government elephants are used in forest patrols, wildlife census, and other activities, and are protected by rules surrounding their husbandry (see Kharel, 2002).

Owners also described the pressure they felt to keep elephant-backed tourism alive thanks to the perceived importance of tourist dollars to community members. It is estimated that more than a million Nepalese rely on tourism practices for survival (World Bank, 2018: 4), from local handicraft producers, artists and restauranteurs to hoteliers, nature guides and *tuktuk* (taxi) drivers. Pachyderm persons, however, do not reproduce quickly enough in captivity to supply a continuous number of liminal elephant-jeeps (Kharel, 2002: np). Instead, numbers must be supplemented through the importation of elephants from India, and owners regularly do so while at the same time publicly decrying these illegal actions (CITES, 1973; Government of Nepal, 2009; Rao, Vachan, and anon. owner interviews, 2019; Nepal News, 2019).[8] These owners appear trapped between obligation and desire, simultaneously responsible for the financial health of their community, their elephants, and their own success (DBC, AS, Rao, Vachan interviews, 2019). Like captive elephants and owners, those who study human-animal interactions may find themselves suspended between obligation and desire.

***Figure 2*:** A pachyderm person in a broken-down stable in Sauraha, Nepal. She is exhibiting concerning signs such as trunk-sucking, closed eyes, and a lack of interest in her surroundings, despite the presence of strangers and veterinary personnel in the area. Photo by the author

[8] The supreme court of Nepal decided in the autumn of 2021 to enforce cross-boundary trade restrictions, and according to interlocuters, these illegal sales have now ceased. However, this leaves some individuals in more precarious situations, as owners who can't 'offload' sick or elderly elephants to India may simply cease to care for them. One elephant died of starvation and neglect in July 2022, as owners debated who was responsible (OnlineKhabar, 2022).

Part two: anthrozoology as liminal practice

During an interview for a podcast on anthrozoology, I asked Dr Hal Herzog (2021) what advice he would offer someone entering the field. 'Don't major in anthrozoology,' he said. Instead, Herzog suggested taking the path of sociology, psychology, or another field that makes one more employable. 'You can still be an anthrozoologist,' Herzog says, but explains the need to keep oneself mainstream enough to land a job, especially if one hopes to secure a career in higher education. As for undergraduate programmes, Herzog (2021) suggested they need to focus more on hands-on activities which lead to real jobs in established fields instead of offering exclusively theoretical pursuits. As a working anthrozoologist and an educator in an anthrozoology BS program, I was at first taken aback by these comments. But as I thought back to my experiences in the field thus far, I began to see Herzog's point.

My career began in education, teaching middle- and high-schoolers literature, writing and grammar, and later computer use (back before computers became unintelligible to me). I transitioned into veterinary medicine, focusing on wildlife rescue and rehabilitation followed by teaching veterinary technicians. When I decided to pursue graduate studies, the only logical choice was anthrozoology. Described to me as the interdisciplinary study of interactions between humans and OTHanimals, anthrozoology represented a chance to combine my work and educational experience with international travel and cultural studies. I focused my master's fieldwork on a conservation-based travel group and the ways in which their practices impacted community-based conservation of pachyderms in Nepal. Undertaking a social science writing style did not come naturally to me, thanks to the long, strange, meandering, and interdisciplinary road I followed through my career. As mentioned above, I was a writing teacher who transitioned to scientific and biological methodologies upon my return to university. These natural science writing styles became so engrained that upon entering the world of social science, I had to constantly fight my just-the-facts approach to data collection and discussion. Being reflexive no longer came naturally to me.

When I began to pursue publication of my master's research, it quickly became clear to me that rather than being applicable to a wide variety of academic fields, my research had instead fallen into a disciplinary no-man's land. Mainstream tourism journals returned my articles with supportive notes on the writing itself, which were accompanied by rejections suggesting I stick to eco- or sustainable tourism journals (anon. pers. comm., 2020). However,

the sustainable tourism journals suggested that my papers didn't fall within their scope, either, as I included both wild and captive individuals. Journals labelling themselves 'interdisciplinary' notified me that my work 'would be better in a tourism or conservation journal' (anon. pers. comm., 2021), and the cycle continued. I became a liminal researcher, trapped in the spaces between fields and fitting neatly into none. I tabled my early papers and moved on to my PhD research into captive elephants in Nepal.

As I examined the lives of pachyderm persons in Nepal, I used my veterinary experience and my embodied knowledge of elephants to assess their health and welfare. I used deep dives into academic literature as well as stakeholder interviews and stable visits to create a list of welfare impactors unique to the situation faced by captive pachyderm persons within Nepal. I naively thought that with my background and experience, my work would be equally applicable to OTHanimal welfare, social science, and biology journals. Instead, biology-focused referees questioned the presence of qualitative data from non-specialist sources in my assessments, and social scientists wondered why I would desire to submit to biology journals at all. I found myself again adrift between fields.

Relationships on the edges

As an anthrozoologist, the location where one obtains her training often defines the lens through which she conducts research, and the type of journals into which she might 'fit'. My training occurred primarily under anthropologists leaning toward critical animal studies. Therefore, I tend to approach research from an anthropological viewpoint. Some of my feelings of liminality may have arisen from what Scheper-Hughes describes as the tendency for those trained as anthropologists to 'cautiously' position themselves 'above and outside the political fray' (1995: 414). I spent my first year's research naively determined to remain completely objective about what I described as the 'elephant situation' in Nepal. I interviewed elephant owners without judgement; I spent days with elephants and mahouts in stables, I watched as pachyderm persons and mahouts worked harder than anyone I had ever met. These elephants performed both physical and emotional labour (Coulter, 2016: 73), carrying heavy howdahs packed with tourists back and forth across the river and into the jungle, hour after hour, day after day. Pachyderm persons in Sauraha were forced to perform difficult *emotional* labour (Coulter, 2016) as well, expected to refrain from foraging, bathing,

socialising, or drinking while on duty. This emotional labour often exhausted them, resulting in attempts to express their agency while at work. Stopping and eating, refusing to leave the river, attacking or killing their human co-workers, and destroying their own shelters were common ways these pachyderm persons tried to express their agency (Coulter, 2016), and these expressions often resulted in beatings, stabbings, or other forms of violent interaction with their human caregivers.

It soon became clear to me that I would have to embrace Scheper-Hughes (1995) further and release my tight grip on (attempted) objectivity. I would have to allow myself to become 'morally engaged' in the lives of my participants (Scheper-Hughes, 1995: 415). I would have to enter a threshold phase in which Turner explains I would face 'none of the rules and few of the experiences' (1979: 122) for which previous studies had prepared me. I moved into the liminal space between objective researcher and elephant advocate. This liminality offered me the unique opportunity to act as a liaison of sorts between the owners (who initially did not trust me thanks to my nationality and my interest in elephant health) and the advocates (who initially did not trust me thanks to my interest in the owners). I become engaged in efforts to improve the living conditions not only of marginalised captive elephants, but also those of mahouts and mahout families reliant upon elephant tourism money for survival (see Szydlowski, 2021b). In addition, my forced liminality allowed me to care deeply about the elephant owners who were faced with the potential end to a reliable income source, while also caring deeply about ending that same income source.

An end to elephant riding?

Tourist elephant-back safari in Nepal is not going to end in the short term, for a variety of reasons which include the huge uptick in Asian tourists who seek elephant rides, just as tourists from the US, UK, Europe, and Australia have stopped supporting these activities (Aadita, Bailey, Chaudhary, Prakesh interviews, 2019; Long, 2013; Wen and Ximing, 2008; World Animal Protection, 2018: np). Owners describe their unwillingness to make sweeping changes when there is such a high demand for these rides.[9] However, owners *have* agreed to embrace several minor changes to elephant stabling practices which may slightly improve the

[9] For an in-depth discussion of the elephant-backed safari in Nepal, see Szydlowski, 2021b.

current situation for elephants in Nepal. These changes (identified by the author and NGO personnel in Sauraha) include expanding stable footprints, increasing locomotion opportunities via longer chains, allowing access (albeit limited) to natural substrates, and building training and resting walls. Suggesting these changes in journal article form, however, sent me caroming off into the void once again. As readers may have noticed, these suggestions include the continued chaining of captive elephants and their continued incarceration in generally unsuitable conditions. These suggestions are much more nuanced than they appear, but the subtleties were unclear to those reading only portions of my thesis in article form. For example, first attempts to publish my findings which included the above temporary suggestions resulted in reviewers commenting that I was both supporting and perpetuating 'animal cruelty'. They felt that my suggestions, which were meant to be *short-term* welfare improvements, were akin to abuse, as they involved pachyderm persons remaining chained and without free-choice access to natural substrates. But these reviewers may have simply missed the point, as anyone unfamiliar with the complex situation within the stables of Nepal is likely to do. Instead of pushing for landscape-level change, which has thus far been unsuccessful in Nepal, I am hoping for slight changes that may immediately improve elephant welfare. As I hope is obvious by now, I do not wish to see elephants remain chained in Nepal, but rather am looking for a solution which both improves their current condition and engages with them as equal participants in elephant-mahout pairs while they await broader long-term changes.

Like other advocates working within Nepal, I would like to see all safari elephants moved to large pastures where they can live out their lives expressing their preferences for company, food, substrate, and rest. I will continue to advocate for chain-free facilities in which tourists do not touch, feed, or interact with captive elephants. I will also support ongoing mahout training in operant conditioning. However, a change to this style of management, or the relocation of elephants to a completely chain-free existence is simply not the current reality in Nepal. Past attempts at mahout training have been very successful, only to have the training discontinued once the sponsors left the country.[10] At this juncture, owners are unwilling to end safari rides, and elephants who are not used in safari are not retired (with

[10] For a discussion of 'traditional' training programmes, mahout PRT training programmes, and the numerous issues with their implementation see Bansiddhi, et al. 2019; Desai, 2008; Gautam and Khatiwada, 2011; Lehnhardt and Galloway, 2008; Mar, 2020; Sukumar, 2003; Szydlowski, 2021b; Varma and Ganguly, 2011.

one exception, mentioned previously), but rather sent back to India to become rental elephants or beggars (Brown, Bames, Renee interviews and pers. comm., 2021). The lives of these rental or beggar elephants and their mahouts are arguably more difficult than their current situation, and thus advocates are keen to keep working elephants-mahout pairs in Nepal (Brown, Bames, Renee interviews, 2019; Vanitha, et al. 2010: 118; Varma, 2008). For these reasons, finding a liminal solution is necessary. Creating slightly better situations for captive elephants is not a long-term answer, but rather a stopgap to improve their lives while they await more permanent solutions. Finding solutions means working with elephant owners and embracing whatever small changes they will allow. It means supporting local activists who embrace changing human perspectives on OTHanimal use by humans. These attitudes have been rapidly changing in Nepal, with grassroots efforts over the last several years focused on supporting alternatives to elephant-backed safari, elephant polo, and elephant football (Animal Rights Club, 2019; MyRepublica, 2020). As elephant owners regularly explained during our conversations, they see an end to elephant use on the horizon, but that doesn't mean they are ready to embrace an end to their income just yet (Brown, Rijal, Teraswin, Vachan interviews, 2019).

***Figure 3**:* Two pachyderm persons in a chain-free corral in Kawasoti, Nepal. Photo by the author

Conclusions: an ending is also a beginning

Sixty-five-year-old Shubhu Kali[11] serves as an ideal example of a liminal elephant. Imported from India, she served as a safari elephant for decades. However, over the last three years, Shubhu was invited to participate in a 'walk with elephant' programme a few times a week, during which she and her mahout spent an hour in the jungle as tourists observed them from a distance. Shubhu still worked on safari, carrying a heavy platform holding two to six guests, up to nine times per day, but for a few hours a week she was semi-free. Her mahout walked next to her and refrained from yelling or beating her. She was allowed to stop and scratch, dig, rub, and relax. She was truly a threshold elephant, suspended between safari duties and glimpses of freedom. During 2021, Shubhu began to slow down, thanks to her advanced age. Instead of selling her back across the border (as is custom, see above), her owner built her a chain-free corral and allowed her to fully transition from safari duties to retirement. Shubhu became one of very few privately owned individuals retired rather than sold. When Shubhu passed in the summer of 2021, townspeople flooded in to pay their respects. Shubhu was painted with colourful dye, and flowers laid upon her head before she was buried near her stable. When Shubu was first placed in her grave, onlookers felt she did not seem 'comfortable' and thus she was repositioned (Bames, pers. comm., 2021). The difference in human treatment of living and dead safari elephants is profound, with more respect being paid to her rite of passage between life and death than to her experience of living itself.

Perhaps it is time to consider that being liminal can be a gift. It may provide a welcome change from the rigours of daily life, or perhaps allow one to simultaneously hold an understanding of two conflicting viewpoints. I have been simultaneously an anthrozoology teacher and a student, an advocate, and a researcher. I have been a friend to both human and pachyderm persons, even when it appeared these friends could not peacefully coexist, and I might be forced to pick sides. Without my intersecting careers in education, conservation, and biology, I would not likely have ended up in Nepal, nor would I have met any of the persons who inspired me to write a PhD. Not fitting neatly onto a list of tick-boxes has served me well.

[11] Name anonymised. All female elephants in Nepal are given the surname 'Kali' in honour of the Hindu goddess.

Let me return to Dr. Herzog's comments about anthrozoology, employability, and education. Perhaps rather than focusing on what anthrozoology may not have been in the past, such as the previously mentioned debates that the field was not well-defined, accepted as an independent discipline, grounded in hands-on knowledge, or offering employment options, we should instead focus on what the field *is*. Liminal. This liminality is what allows undergraduates in anthrozoology to apply their learning to a variety of disciplines without having to commit to only one. It allows behaviourists, veterinarians, lawyers, psychologists, companion animal guardians, and the public to interact in ways that allow open dialogue about our relationships with OTHanimals. This liminality allows us to accept that both humans and OTHanimals find themselves in less-than-ideal circumstances, and that we should work to improve the lives of all with whom we share the planet. It is what allows former literature teachers to undertake bio-anthrozoological studies of humans and elephants in Nepal. Embracing the liminal states of ourselves, our field, and our research participants may lead us to embrace anthrozoology as symbiotic ethics, which acknowledges both 'the inextricable connections we share with other life forms', and our obligation to recognise all sentient animals as 'ethically significant beings' (EASE, 2021).

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Michelle completed her PhD at the University of Exeter in 2021 and spent the last three years teaching anthrozoology at Beacon College in Florida. Michelle has been teaching a variety of subjects from OTHanimal science to literature in both private and public settings over the last 30 years. She has spent the last ten focused on conservation research, pachyderms, and community-based sustainable development in Nepal. Michelle is a member of the American Zoological Association, the Elephant Managers Association, the Exeter Anthrozoology as Symbiotic Ethics working group, the International Society of Anthrozoology, Researchers and Students on Neurodiversity (ReASoN) and chairs the board of the Katie Adamson Conservation Fund. She also serves on the advisory board of Stand Up 4 Elephants. Michelle co-hosts The Anthrozoology Podcast and can be reached through her informational website: www.internationalelephants.org (info@internationalelephants.org).

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