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**(RE)CREATING RELATIONSHIPS WITH NATURE:
RIGA ZOO VISITORS, INHABITANTS AND EMPLOYEES**

**ATTIECĪBU (PĀR)VEIDOŠANA AR DABU:
RĪGAS ZOO VIESI, IEDZĪVOTĀJI UN DARBINIEKI**

MASTER'S THESIS

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ABSTRACT

Modern zoos have pressure to combine the welfare of captive animals with educational, research and conservation efforts. While the visiting experience is becoming more immersive, researchers argue that our understanding of multispecies relations remains limited. The aim was to understand how humans make sense of their relations with companion species at the zoos. I follow Donna Haraway's approach, using string-figure as a theoretical device to map the human-animal relations and view the zoo as a multispecies contact zone. Based on qualitative analysis of my ethnographic fieldwork data from Riga Zoo, I argue that when placed in context of the current debate on Anthropocene, zoos are site of reciprocal multispecies entanglements that mirror our understanding of our place in nature.

Keywords: Multispecies relations, ethnographic fieldwork, zoo

ANOTĀCIJA

Mūsdienu zoodārzi tiek mudināti apvienot labturību nebrīvē turētiem dzīvniekiem ar izglītojošām, pētnieciskām un sugu saglabājošiem aktivitātēm. Kamēr apmeklētāju pieredze kļūst aizvien iekļaujošāka, pētnieki uzskata, ka mūsu izpratne par daudzsugu attiecībām ir ierobežota. Mans mērķis bija saprast, kā cilvēki izprot viņu attiecības ar pavadošajām sugām zoodārzā. Sekojot Donnas Haravejas pieejai, izmantoju saišu-figūras kā teorētisku rīku, lai kartētu cilvēku-dzīvnieku saites un saskatītu zoo kā daudzsugu kontaktzonu. Balstoties uz kvalitatīvo analīzi lauka darbā ievāktajiem datiem no Rīgas Zoo, es secinu, ka šī brīža Antropocēnas diskusiju kontekstā, zoodārzi ir vieta, kur sugu attiecības savstarpēji sapinās, atspoguļojot mūsu izpratni par mūsu vietu dabā.

Atslēgvārdi: Daudzsugu attiecības, etnogrāfisks lauka darbs, zoo

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INTRODUCTION

In the context of global risks to biodiversity, efforts of species conservation and environmental education, modern day zoological gardens (hereinafter- zoo or zoos) often play an important part, especially in the context of sustainability and actions taken to find new ways for sustainable futures in Anthropocene. Being in the position of mediator and providing a venue for a social and physical contact zone, zoos can act as an ambassador of multispecies beings. This entails zoos taking up the responsibility of introducing animals, their habitats and interconnectivity of species to urban dwellers who are interested in forming these connections with what often is out of reach, framed as a remote, exoticized wildlife. At the same time, while zoos might present this opportunity to gaze upon and sometimes even interact with animals living in their enclosures (and advertise this contact to boost entrance ticket sales and maintain the business), they also hold the responsibility towards the welfare of these animals and the species they belong to (see Riga Zoo; EAZA; CBD), as well as the habitats, which are not always as distant as they might seem.

While there has been some studies with focus on the interactions between zookeepers and zoo animals in their care (Mc Loughlin 2023; Gisler 2021; Reed 2017; Palmer, Malone, and Park 2016; 2015; Palmer 2012; Braverman 2011), in this thesis I argue that most people working at a zoo form some sort of relationships with the animals in this contact zone (either exhibition, feed or wild/visiting animals). Therefore, they, too, have a lived experience on how they understand the positionality of themselves and the concepts of species and individuals (human and beyond). Hence, I set out to explore the complex relationships formed in this space of multispecies contact and care in captivity that is simultaneously a site of entertainment, conservation, research and education.

The aim of this research is to investigate how humans experience and perceive their relationships with companion species in these contact zones, at the zoo.

I have tried to achieve this aim by following the threads on how the people working at Riga Zoo conceptualize the role of the zoo in the context human-animal relationships and how do the past and the present perceptions affect their understanding of encounters with the various beings they meet in the zoo.

Research objectives were set as follows:

- conduct preliminary literature review on discourse of human-animal relations, multispecies ethnography and studies conducted in similar setting;
- plan, arrange and carry out fieldwork in Riga Zoo, according to plan;
- process fieldnotes and transcripts, develop coding categories;

- code text corpus and carry out qualitative analysis of coded segments;
- arrive to relevant conclusions and summarize insights.

Main data sources of my research include a sample of ethnographic data drawn from the fieldwork I carried out in Riga Zoo 01.03.2024–22.03.2024. The data set includes 11 interviews with people working at Riga Zoo and fieldnotes from participant observation of their daily practices of attention and various forms of care. I draw my method of mapping the contact zone and relations within it from Donna J. Haraway's (2016) string-figure game, including groups of humans and animals as the multispecies persons entangled in the metaphorical string-figure, and, furthermore, situating the relations in the context of the debated Anthropocene.

The thesis is structured in 4 consecutive chapters and followed by conclusions. All of the figures and tables included in the thesis are listed at the beginning of the document. In all cases, the figures and tables are of my own making and the pictures taken at the zoo were obtained with consent of those involved. Regarding the structure and contents of the thesis, the arguments are discussed as follows. Chapter 1 provides the outlook on the academic debate around the theoretical concepts relevant to this thesis, such as Anthropocene, species, string-figure and concept of the zoo, Chapter 2 covers the structure of this research and the methodological tools used within it to collect, process, analyse and store research data. Chapter 3 is framed as a narrative of my fieldwork reflections, including some preliminary findings, and context that informed my analysis. Chapter 4 elaborates on the devices used for analysis of data, combining the previously discussed theoretical concepts with the context of the fieldwork to provide a more holistic understanding of the findings. Lastly, the thesis ends with a conclusion which lays out the key findings in response to the research question, as well as indicates potential directions for further research in this field.

1. ZOO IN THE BIG (THEORETICAL) PICTURE

According to authors across the scholarship of anthropology, cultural geography, conservational biology, anthrozoology, heritage, animal, and environmental studies, we are currently living through the Earth's sixth mass extinction (Barnosky et al., 2011; Dirzo et al., 2014; Kolbert, 2014; Leakey and Lewin, 1995 cited in Fredriksen 2016; Haraway 2016; Tsing 2017). While approaches on how to react to these times and efforts (or lack thereof) to do something about it differ, scholars seem to be in agreement that biodiversity is inherently good and needed, and the extinction of species of flora and fauna, most often due to disintegration of their habitats – bad. Although at this point in time it might seem self-explanatory, I think that it is important to point out that this premise is shared amongst the scholars that have informed my thesis.

Following Marilyn Strathern's idea that "it matters what ideas we use to think other ideas" (Strathern 1992), I have elaborated on how, in the light of the ongoing academic debate, I see the concept of Anthropocene, use of various terms when referring to (and making decisions for) species, and ties amongst multispecies. Specifically, I have drawn out examples of other studies carried out in zoos, to add their ethnographic findings to how I interpret the results of my own analysis. Lastly, I offer a summary of how these concepts I laid out intersect and support my pursuit for answer to the research question formulated above.

1.1. Ontology of Anthropocene and what it presupposes

When I began literature review, I quickly noticed that many studies on interactions between humans and other species referred to Anthropocene, often without further any further explanation than, namely, that it is the time we are currently living in. Yet living in this time-space, named as such, takes certain set of premises for granted. Situating this thesis in and with Anthropocene, I thread with care on how I understand the epoch and what comes along with it.

The term Anthropocene was proposed by scientist Paul J. Crutzen at a conference in 2000 "that the Earth had left the Holocene and entered a new geological epoch, the Anthropocene, driven by the impact of human activities on the Earth System", suggesting that it should be dated back as early as the beginning of the industrial revolution when the first steam engine was built and the use of fossil fuels began – 1784 (Crutzen, 2002; Crutzen and Stoermer, 2000 in Steffen et al. 2015, p. 82). As Christian Schwaegerl points out, initially, the term was meant to break the pattern of thinking that geological epoch is on a course of its own, determined by nature and the "environment", detached from influences of the people and "civilization". That

it was meant to convey the idea that humans not only have an impact but also a decision to make, based on which the future of the Earth System will unfold (Schwaegerl 2021). Later on, the ontology of Anthropocene travelled beyond the domain of geology, started circulating the discourses of other scientific fields, including social sciences. It provoked further changes in the ways of thinking within and outside the supposedly reliable categories, especially those of nature and culture, and their combinations (Fredriksen 2016, p. 691; Gough and Adsit-Morris 2020, p. 220).

One of the troubles of placing ourselves and the current events at Anthropocene, as Anna Lowenhaupt Tsing (2017) and Donna J. Haraway (2016; 2008) point out, is that it can presume a very unbalanced and anthropocentric view on the order of things, giving us – the smart, capable, complex and mighty humans – the agency to dictate the flow of events, leaving all other actors and critters on the sidelines, in a passive role. If Anthropocene is used to highlight the beautiful and horrible accomplishments of humans as the reason for the current situation, it tells a very one-sided story. Deborah Bird Rose (see Tsing 2017, ch.3) points out that if we view humans as detached from the world beyond humans, as a collection of resources and “things” for us to use, it reduces our viewpoint, blinding us to the relations between the various life-forms and forces. However, she says, human exceptionalism can come in handy in honing our point of view, if applied when considering the “exceptional damage” caused by humans, which does set us apart from other species (ibid.). Later on in the same book, Tsing along with Heathers Swanson, Nils Bubandt, and Elaine Gan propose thinking of Anthropocene as an epoch which brings changes to multispecies life with uneven effects. A similar idea emerges from Haraway’s works, in which she ridicules the audacity of humans to take credit for all the transformations that have taken place until this point in time. Even being human, alive and biologically functional, requires collaboration of multispecies assemblage, companions of human and colonies of germs (Haraway 2008, p. 31; see also Ogden et al. 2013, p. 14; Kirksey 2015). Being human or being living, according to Haraway, means to be “*becoming with*—in a contact zone where the outcome, where who is in the world, is at stake” (ibid., p. 244).

Another trouble is that Anthropocene, as initially proposed, assumes homogeneity of human species, naming the humans as whole the force of affect with unified agency. Tsing’s explains that humans in Anthropocene cannot be imagined as a homogeneous “geological force”, because humans as a race, as species, are not situated in equal relations amongst one another, neither are they treated as equally irreplaceable or disposable (ibid.). Haraway repeatedly returns to the wordplay of response-ability, stressing how we are all responsible for shaping these times and conditions, yet how also “we are not all response-able in the same ways. The differences matter – in ecologies, economies, species, lives” (Haraway 2016, p. 29).

Therefore, in this context, thinking of humans as a united front, even just for the sake of argument that humans are endangering the liveability of this planet, it is not helpful or useful. Attention must be given to nuances and only through exploring the situated differences can we begin to understand the situation as a whole. As Tsing reminds us, “an extinction is a local event as well as a global one. Extinction is a breakdown of coordinations that has unintended and revibrating effects” (Tsing et al., 2017). Therefore, it should be inspected in scale.

Consequently, the use of Anthropocene as a term, and the concept as a whole, still is potentially useful for situating the perception on role and value of humans and other species in the context of this research. It gives a common ground for situating the conflicts in how people who are familiar with the extinction discourse address it and the actions that should (or should not) be taken in response to it. Nevertheless, use of it requires attention to the specific attitudes embedded in the interpretation of it.

As Donna Haraway says, the best way to muddle through the Anthropocene is through “staying with the trouble” – which is the advice I have tried to follow in this thesis. Therefore, the next subchapter addresses the muddy concept of species and species-oriented conduct.

1.2. Addressing the species with metaphors

In this subchapter I shift my focus to the terms used, and concepts implied, when referring to life forms that do not always necessarily include humans. Starting with the concept of species, I follow the thread I have found linking the works of multiple scholars, tracing the use of the following terms: non-human, other-than-human, beyond-human, companion-species and multispecies, critters, assemblages, entanglements. Alongside it, I have highlighted what other researchers have considered as the principles for organizing species for various purposes and how that reflects on the perspective that comes along with such worldbuilding.

In biology, according to Irus Braverman, “species” is the smallest basic unit you can consider for any efforts of conservation. As she explains, it also reflects in how individual good can be considered as less significant as that of a collective – of species. Especially with endangered species, the concept of species helps to spotlight and monitor the beings under the threat of extinction, while at the same time ranking them with a value that is higher than for other relatively less endangered species (Braverman 2015). From a device of illumination, it becomes a tool for biopolitical control in lining out hierarchies. It aids people in deciding which lives are more valued and which are more deserving of care, and at what cost – individual and/or collective (Fredriksen, 2016, p. 690).

With this view, there are two main metaphors that are still in use for organizing living being and species in hierarchies and systems, metaphor of ladders and metaphor of trees. Andreas Hejnl (in Tsing 2017, ch.5) argues that these particular metaphors for imagined order are at fault for our limited perception of life in nature, relations within it.

Firstly, he explains that the metaphor of ladder, suggested by Aristotle in *Historia Animalium*, assumes that all life can be ranked based on its complexity, which remains unchanging throughout time. In his example Hejnl gives a chain that illustrates this ranking from “lower” (or “primitive”) to “higher” (or “complex”): rocks–plants–insects–fish–sheep–lions–humans–gods. The use of this principle of complexity, as he adds, is also why there are groupings of more “intelligent” animals – primates, dolphins, and such. Since, anthropocentrically, the most complex natural creation is the human brain, these animals with displayed “intelligence” are valued higher (ibid.).

Secondly, Hejnl offers the alternative metaphor for stressing relations between the species from an evolutionary standpoint, the metaphor of a tree. It structures species according to historical evolution, tracing the common ancestry, once again tracing from simple (the trunk) to more numerous variations of complex (the branches). Also called cladistics, this ordering structures species by genealogy, based on relations through the common morphological traits. Similarly as in other fields, the emergence of new technologies introduced changes and brought the ordering to a new level, instead of comparing the visible traits of the animal or plant, scientists can now see the common and differentiating elements on nucleic acid and protein level, through sequences of DNA and RNA (ibid.). In the light of these new nuances, previous knowledge demanded revision, which led to realisation that perhaps the long-standing project of organizing all life is not that simple or even possible. Hejnl offers the example of two species – comb jellyfish and tunicates – which have not followed the underlying belief that species are evolving in a “progressive” and “developmental” fashion from simple to complex (ibid.).

This is where the attention shift to multispecies steps in. In 2010, Ebsen S. Kirksey and Stefan Helmreich published a piece “The Emergence of Multispecies Ethnography”, covering the advancements and debates on the relationship between nature and culture with an emphasis of the lives that do not include, yet mingle with those of humans. On the use of terms and the perspective from which they are chosen, they write:

“If we take otherness to be the privileged vantage from which we defamiliarize our “nature,” we risk making our forays into the nonhuman a search for ever-stranger positions from which to carry out this project. Nature begins to function like an “exotic” culture. The goal in multi-species ethnography should not just be to give voice, agency or subjectivity to the nonhuman—to “recognize them as others, visible in their difference—but to force us to radically rethink these categories of our analysis as they pertain to all beings.” (Kirksey and Helmreich, 2010, p. 563)

Therefore, along with suggestions from Hjenol and other scholars (Fredriksen 2016; Braverman 2015; Haraway 2016) this reminds to being mindful of these hierarchical metaphors. Firstly, because they assume the human position at the top in relation to other, lesser, beings, and, secondly, it takes the singular, common trajectory of development from simple to complex as common for all beings, which is not necessarily the case. Hence, I believe that it is important – how species are defined, for what purposes and with what assumptions in mind. It is important because these principles that shape the defining, ranking, and ordering of species also affect small and big decisions made in the space and time where these species are met.

Furthermore, between texts discussing in multispecies relations, I have noted the use of the following terms when referring to the species which interact with, depend on and are crucial for the livelihood of humans – *non-human*, *other-than-human*, *more-than-human*, *beyond-human*. In reference to the term non-human, Susan Leigh Star has said that the term “is like non-white (...) it implies a lack of something” (Star 2008, cited in Kirksey and Helmreich, 2010, p. 555). The same idea is also expressed by Haraway (2008, 2016), that the naming of species in reference to the human implies human exceptionalism. In her own works Haraway shifts between using these terms, but she also uses *critters*, when referring to all living beings that can affect and are affected by others and *companion species*, when stressing the connectivity between the discussed companions. When explaining the use of the latter, she says:

“Companion species are relentlessly becoming-with, The category companion species helps me refuse human exceptionalism without invoking posthumanism. Companion species play string figure games where who is/are to be in/of the world is constituted in intra- and inter-action. The partners do not precede the knotting; species of all kinds are consequent upon worldly subject- and object-shaping entanglements. In human-animal worlds, companion species are ordinary beings in-ecounter in the house, lab, field, zoo, park, truck, office, prison, ranch, arena, village, human hospital, forest, slaughterhouse, estuary, vet clinic, lake, stadium, barn, wildlife preserve, farm, ocean canyon, city streets, factory, and more.“ (Haraway, 2016, p. 13)

In critique against the use of *companion species*, Hal Herzog (2010) in his book *Some we love, some we hate, some we eat* argues that the idea of companion, at least in case of domesticated animals, does not align with the situation of ownership rights and decision-making rights. He says that the comparison would demand recognition of agency and freedom. Without it “the terms companion animal and pet guardian are linguistic illusions that enable us to pretend we do not own the animals we live with“ (Herzog 2010, p. 74). Yet I see that by applying the associations of companionship, we highlight the responsibility the companions hold towards one another, putting the emphasis on the process of being-with or, as Haraway puts it, becoming-with. With Haraway’s approach, “kin making is making persons, not necessarily as in individuals or humans” (Haraway, 2016, p. 103) and, thus, companion species are likened to persons.

Hence, for applying this term I keep this in consideration and extend this to not just animals considered as pets, but animals considered as part of zoo collection, or as wild creatures visiting the cityscape, or as “zoe” or killable life (Kirksey and Helmreich, 2010, p. 556; de la Cadena and Martínez-Medina 2021) – bred and grown with the purpose to be used for feed.

Coming back to the turn to multispecies, this perspective is useful for this thesis, for investigating human-animal relations in the context of the zoo, where some but not all become companions and “work” together, in entangled companionship. As Haraway explains the process of becoming – “becoming is always becoming with—in a contact zone where the outcome, where who is in the world, is at stake” (Haraway 2008, p. 244). And the role of the multispecies perspective is to show “how a multitude of organisms’ livelihoods shape and are shaped by political, economic, and cultural forces” (Kirksey and Helmreich, 2010, p. 545).

Another useful way of referring to a collection of species is by looking at assemblages and entanglements, which Haraway deems essential. The becoming-with, as she says, happens in collaborations and “that kind of material semiotics is always situated, someplace and not noplacement, entangled and worldly” (Haraway, 2016, p. 4). Yet the connections are specific, situated and made of different weights. For methods on sorting and investigating these multispecies assemblages, entanglements and contact zones, the following subchapter elaborates on Haraway’s string-figure approach.

1.3. String figures as a theoretical device

While terms are important, this thesis primarily places the focus on the ties and connections between the human and companion species, and between individuals in the context of these entanglements. This subchapter introduces the theoretical device that directs the analysis of this study and serves as a transition to the subsequent, concluding subchapter which connects the discussed concepts under the context of the thematic field used in this thesis.

In context of contemporary species conservation studies, activities and policies, Mazzocchi offers to rethink the values that meld the principles of knowledge-building and caretaking which we consider as part of sustainability discourse under the Western scientific thought. From this point of view, the dualistic notion of what is natural, wild and protectable and what affects the natural and drives growth (or rather development) goes back to the old-fashioned dichotomy proposed by Descartes’s – dividing of the realities in *res cogitans* (psychic) and *res extensa* (physical) – nature being external, material and, thus, distinctly separated from the human (Mazzocchi 2020, p. 79). Although it does prevail in this and other discourses, Mazzocchi suggests constantly considering a parallel flow of thought and practice,

informed by indigenous cosmologies, namely, to “perceive everything in the universe as interconnected and interdependent. Nature and the human realm do not constitute separate domains, instead they are experienced with as sense a unity and mutual belonging” (ibid.). With this he proposes that the key theme for understanding this perception of human-nature relationship is to think of it as *reciprocal*, as constantly participating in the cycles of giving and receiving for the relationship to continue, to sustain relations instead of resources.

The idea that humans and animals (along with other critters, but I will retain the focus on the former) should be viewed as interdependent and interconnected also appears in discussions on rhizomatic understanding of assemblages, first formulated by Deleuze and Guattari (1987) in *A Thousand Plateaus: Capitalism and Schizophrenia* (Ogden et. al 2013; Haraway 2016). The key idea behind the rhizomatic thinking is that the connections are not dialectical, and neither are they hierarchical, countering the way how the previously discussed metaphorical approaches to species view them in a system (Gough and Adsit-Morris 2020, p. 220). As enticing as it is to intake the image of the local and global ecologies being interconnected beyond any structure to explain or trace the ties, Haraway and Thom Van Dooren concur that the “everything is connected” trope is not a productive tool for gaining an understanding of these relations. Van Dooren suggests a slightly different through:

“Rather, everything is connected to something, which is connected to something else. While we may all ultimately be connected to one another, the specificity and proximity of connections matters - who we are bound up with and in what ways. Life and death happen inside these relationships. And also we need to understand how particular human communities, as well as those of other living beings, are entangled, and how these entanglements are implicated in the production of both extinctions and their accompanying patterns of amplified death” (Van Dooren 2014, p. 60, cited in Haraway, 2016, p. 173)

For lining out these threads of connection Haraway proposes using the theoretical trope of string figures, which, as she explains, provides “a way to think-with a host of companions in sympoietic threading” (ibid., p. 31). She also elaborates that it is important to follow these threads to map out the balances in these relations, because, as cited above, the differences matter. Hence, the string figures are:

“about giving and receiving patterns, dropping threads and failing but sometimes finding something that works, something consequential and maybe even beautiful, that wasn’t there before, or relaying connections that matter, of telling stories in hand upon hand, digit upon digit, attachment site upon attachment site, to craft conditions for finite flourishing on terra, on earth. String figures require holding still in order to receive and pass on. String figures can be played by many, on all sort of limbs, as long as the rhythm of accepting and giving is sustained“ (ibid., p. 10).

Guided by her examples and the discussion on the situatedness of perspective above, I note how the emergence of string figure, representative to the given contact zone, requires attention to all participants of multispecies, who “hold” their parts of the thread in some distance of one another. I have included this part partly because it has informed my analysis, but also

because these principles behind naming and organizing life and persons of different species aid my inquiry on how do people decide – which lives to care for, which are worth the trouble and which are (made) invisible.

In the following subchapter I have pointed out the studies carried out in other zoos and the few key findings that illustrate the human-animal relationships in this peculiar context of the modern zoo.

1.4. Evolution of zoos and the changing relationships within

As indicated in the subtitle and in the title of the thesis, my research interest lies in the creation and recreation of multispecies ties, the prefix here refers to the changing nature of relations, as the conditions around those relations change with time. Therefore, this subchapter reviews the changes the concept of zoos has undergone, along with changes in presentation of human-animal relationships, in hope to connect these changes to the concepts discussed so far.

Zoos as we see them today are often pointing out to how different they are from the establishments they used to be when they first opened the doors for the visitors – visual improvements, map arrangements, as well as shift in purpose and role they wish to take up in reference to local and global ecologies. With time, throughout the past centuries, in part due to new technological advancements and social movement on the animal rights, the aristocratic animal menagerie, zoological gardens, conservation parks and even petting zoos have been a subject of transformation (Mason 1999; Tribe and Booth 2003; Braverman 2011; Reed 2017; Gisler 2021; Fekete and Szilágyi 2021).

The concept of zoological gardens can be traced back to ancient kingdoms and imperial histories where humans and nonhumans alike were exhibited as artefacts of the status, wealth, and power (Mc Loughlin 2023). Such live assemblages, called “menageries”, were presented as private collections of high-rank families or rulers until the late 18th century, when the practice took a turn towards development of zoological gardens, shifting the focus from private to public establishments (Braverman, 2011, p. 812; Fekete and Szilágyi, 2021, p. 84). Along with the changes in standards, boundaries and expectations, by opening up to a wider audience, the zoo took up an educational role, presenting the animals in cages with a strong focus on the taxonomical classification, as it was defined at the time, promoting the contemporary scientific advancements and the contemporary approach to understanding the vast variety of species within the establishment and in the “wild” outside of it (Braverman, 2011, p. 812).

Zoos were designed as living museums, intended for the promotion of scientific agendas and for the education of the general public. The oldest existing zoo, the Vienna Zoo in Austria, evolved from the Imperial Menagerie at the Schönbrunn Palace in Vienna, and was opened to the public in 1765. In 1795, the Jardin des Plantes was founded in Paris with animals from the royal menagerie in Versailles,

primarily for scientific research and education. The London Zoo was established in Regent's Park in 1828 and opened to paying visitors in 1847. In 1860, Central Park Zoo, arguably the first public zoo in the United States, opened in New York. (ibid.)

Another notable reference point is the opening of the first bar-less zoo, in 1907 - The Hamburg Zoo or Tierpark Hagenbeck (ibid.). Designed by Carl Hagenbeck, the new layout allowed the animals to move around in relative freedom between the trees, included in the enclosure, rendering the separation between the visitor and the animal much less visible (Mason 1999, p. 193). A similar principle is at the base of the enclosures in the modern zoo. This shift in the landscape and in the perspective offered to the visitor signifies a change in the viewpoint of human-animal relations, moving animals from "biological curiosities" to "part of overall environment", where the wall both physically and metaphorically becomes invisible, yet does not disappear (Tribe and Booth, 2003, p. 69). Notably, despite the contested colonial history, to this day, there is an expectation that any modern European metropolitan city has a zoo, which speaks both to how the zoo has become an urban phenomenon and to what it means to live in a metropolitan city (Braverman, 2011, p. 814; Reed, 2017, p. 423).

However, if we list the roles the modern zoo takes up on, most literature distinguishes the following four: entertainment, education, research, and conservation (Mason 1999; Tribe and Booth 2003; Roe, McConney, and Mansfield 2014; Braverman 2015; van Dooren 2015; Rice et al. 2021; Chrulew 2021; Mc Loughlin 2023).

Nowadays, regarding animal welfare, as more attention is paid to the animal behaviour and needs in the context of captivity, Fekete and Szilágyi (2021) list the "five freedoms" which the modern day zoos are expected to upkeep: "freedom from hunger and thirst; from discomfort; from pain, injury or disease; from fear and distress; and freedom to express normal behaviour" (Fekete and Szilágyi, 2021, p. 82). The practices of animal care also include techniques of both getting close to and distancing from the animal, in order to ensure their wellbeing in captivity while avoiding their domestication (Chrulew 2021). And while they are not considered domestic animals, as pets or cattle, they are neither considered as wild: "they are not hybrids but they never fully embody their species. They are body doubles, stand-ins for the real animals, ambassadors for their conservation" (Braverman, 2011, p. 823).

Furthermore, the expectations towards the layouts of the modern zoo are discussed, once again, by putting an emphasis on the interconnectedness the image of the animal should carry to the habitat of the species:

"A well-designed, diverse enclosure that mimics the complexity of nature is a prominent ecological solution regarding the mental health of captive animals, transferring a vital message: animals are inseparable from their environment. Their protection, therefore, goes hand in hand with the conservation of the environment and the animals' habitats." (Fekete and Szilágyi, 2021, p. 83)

From recreational point of view, modern zoo serves as an oasis of “nature” in the city, while also being a part of the experience within the cityscape, providing visitors “a relief from what felt like too-human-filled metropolitan life” (Reed, 2017, p. 422) or in other words a “alleviate urban pressures (...) earn respite from unnatural surroundings” (ibid., p. 423). The lively scenes constructed with the landscapes and inhabitants of the zoo seem to contrast the environment beyond the borders of the zoo, hence highlight the difference between the city and the “nature”.

However, the “nature” visible to the visitor of the zoo is “sanitized and human-free”, avoiding any “upsetting” and “anything that threatens the pleasant feelings prompted by the zoo’s image of nature is rendered invisible, including disease, competition, and, above all, ageing and death”, hence, making the visitors expectations of “wild nature” far from reality (Braverman, 2011, pp. 821–822).

In regard to biodiversity preservation efforts, there are recommendations and guidelines from World Association of Zoos and Aquariums on how to support and participate in species conservation for threatened and endangered species:

“*In situ* activities include endangered species rescue, habitat protection and restoration, reintroduction, and supplementation. *Ex situ* activities include the genetic management and captive breeding of threatened species, education, and research. The contribution of zoos to conservation can be categorised as direct wildlife management, research, conservation education, and financial contributions to conservation.” (Tribe and Booth, 2003, p. 67)

Furthermore, Roe et al. (2014) suggests that the contact with “nature” at the local zoo in form of “exhibits of local, native species would help children connect with their own natural environment, rather than one far away, and foster interest in local conservation projects” (Roe et al., 2014, p. 540).

Meanwhile, Van Dooren (2015) points out that although conservation efforts are often framed as “management” or “support” extended to the particular species, if seen from non-human point of view, these projects often take form of “violent-care” and are based on two main aspects – how rare or how native the species are to the environment that is taken as a reference point. Among the acts of violent care, he notes the more apparent, like captive breeding, where the utilitarian approach presumes the interests of the species as prevalent to those of an individual animal, and the less apparent, where the animal is not protected, if they are not defined as native or rare enough (ibid.).

Considering the above-mentioned shifts, it is evident that the contemporary zoo, at least in theory, is subject to more demanding attention to detail when regarding the conditions they provide for the animal, the portrait they present to the visitor and the efforts they devote to (some) species they are representing in the zoo. It can be concluded that along with the changes

in the physical environment, there has been a transformation on perception of human-animal and animal-environment relations.

However, another important factor to consider, is the way how humans make sense of the relations they create with the animal at zoo. Mc Loughlin writes that “in the zoo, charisma, rarity, and popularity determine the zoo value of animals, and as a result, the degree of interspecies dialog that is made possible” (Mc Loughlin, 2023, p. 1932), compiling a similar list of conditions as offered by Herzog (2010) on how humans make decisions on how to approach the particular animal – by eating, loving or hating it. He argues that it is determined by a myriad of factors that can be grouped like such:

“Instincts seduce us into falling in love with big-eyed creatures with soft features. Genes and experience conspire to make it easy for us to learn to fear some animals but not others. Our culture tells us which species we should love, hate, and eat” (Herzog 2010, p. 65)

When transferred to the context of the zoo, these variables can affect how much the human empathizes with the animal, how much learns and remembers about the species and to what extent connects or distances from the animal and what it represents. Herzog calls out anthropomorphism as a problematic practice which entails “projecting our mentality onto other species” and often results in unreliable interpretations of the multispecies relations (ibid., p.63). He gives an example on his interactions with his house cat: “when Tilly gently rubs her face on my leg, she is showing that she loves me. Wrong. She is scent-marking me with glands on her cheeks, telling the world that she owns me” (ibid.).

Contrary to this stance, Palmer in her studies with orangutans in Auckland Zoo noted how anthropomorphisms and, in a larger scale – empathy, can be a very helpful tool for learning and understanding relations with animals (Palmer et al., 2015). Although she noticed that empathy is often dismissed as a professional attitude, Palmer pointed out that “failing to empathize with animals (...) allows us to create distance between ourselves and other animals” (ibid.), which brings us back to the human/nature divide.

Finally, this concludes the review of literature published in the field of the posed research scope. To synthesize a brief summary, there is a lot of dense history for how humans position themselves and other species in the time and space, trying to make sense or establish some order of living beings. The current debate is set at the time of Anthropocene – an epoch where, anthropogenic deeds are at the centre of attention, and researchers across various scholarships call for a change in perspective, what it means to be human as individual and as species. This also entails a shift away from human exceptionalism and attention to multispecies relations and entanglements, which can be investigated with Haraway’s sting-figure game. In context of zoos, similarly as the perception on species and ordering of species changed and morphed into

something new, so did the zoos, from private menageries becoming public venues of entertainment, education, research and conservation.

2. RESEARCH DESIGN AND METHODOLOGY

Considering the scope and context of the research question, I consulted literature on anthropological research methodology, my own notes on previous research activities within the study programme and compiled the methodological framework within which to carry out this research.

This part of the thesis is organized in 5 subchapters. The first dives in on the details of the selected methods and the reasoning behind their choices, as well as on the practices and principles I kept to for collecting, sorting and storing the fieldwork data. The second subchapter introduces the parameters of the fieldwork, listing research participants and describing the data collected during the fieldwork. Next subchapter elaborates on the ethical considerations and their reasoning. Consequently, in the last two subchapters I have added my thoughts on my own positionality and the limitations I encountered while working on this thesis.

2.1. Collection and management of data

Most of my research design was informed by the book on “Research methods in anthropology: qualitative and quantitative approaches” by H. Russel Bernard (2006). In order to gather a reliable sample for analysis of this case study, I decided to collect qualitative, ethnographic data through a combination of individual in-person and digital semi-structured interviews, spontaneous informal conversations, and participant observation.

Throughout my research my main unit of analysis, as understood by Bernard's definition, were my research participants - the people working at the zoo – and the ties they experienced with the animals they interacted with (Bernard, 2006, p. 50). Notably, I share aspirations of multispecies ethnography to, as Ogden et al. (2013) says, to be “attuned to life’s emergence within a shifting assemblage of agentic beings” (discussed in Chapter 1) and I am trying to remain mindful towards the presence, positionality, and agency of companion species. However, I also recognize my current limits in time, knowledge and research skill to fully take up on the task in including them as research participants. Hence, I have kept these perspectives in mind, the main principles of multispecies ethnography have informed my interpretation of the results, but I cannot claim that I have involved them in my research the same way and capacity as the human research participants.

For semi-structured interviews I used an interview guide with composed question blocks (see Appendix 1). Yet I also tried to remain flexible and let the participant lead the flow of the conversation, as far as it remained in the general lines of the research topic. I chose this as one

of the methods because this type of interviews, according to Bernard, is suggested if the research is fast-paced, allows only one interview per person and involves “people who are accustomed to efficient use of their time.” (Bernard, 2006, pp. 193–212).

However, I also used the opportunities provided by the participant observation to build rapport and gather initial information through informal conversations (unstructured interviewing) while going across the zoo territory from one point to another or while assisting them with a repetitive activity. In both types of interviews, I mostly employed silent probing, use of the “uh-huhs”, “tell-me-more” and occasional long question probing (ibid., p. 217–220).

Regarding participant-observation method, if I consider Bernard’s distinction of 3 roles: “(1) complete participant, (2) participant observer, and (3) complete observer” (ibid., p. 365), for the first couple of days I remained in the third role. Despite attempting to offer assistance or participate in routine tasks, I was assured that they did not need help or did not want to “bother” me because it is their job and they can manage. With time, however, for majority of participants the sentiment changed and for most of the fieldwork I took up the second role – participating observer. I was involved in daily routines and some less regular events, which allowed me to learn a lot of practical details and gain insights into what was supposedly “common knowledge” for these research participants, which in turn led me to adjust my interview guidelines, questions, terminology and phrasing I later used in interviews.

For noting my observations throughout the fieldwork days, I collected fieldnotes in both physical (notepad and pen) and digital (built-in tool for notes on my phone) format, deciding on the most appropriate for the occasion. The observations and talks took place both indoors and outdoors, so I tried to jot down notes in various conditions – from well-heated classroom setting to mildly freezing, windy around-zero temperature. Sometimes the decision was made not just out of physical but also sanitary reasons. While I could write notes in my paper notepad even in the cold weather with my gloves on (and not type them out on my touchscreen phone), the paper notepad would not take as well on being disinfected as my phone did.

On most fieldwork days, I spent the evenings collecting, reorganizing the notes and moving or rewriting them into a more coherent digital document, which I would later use for analysis and coding. Both Bernard’s suggestions and examples gathered in *Naked Fieldnotes* (Elliott and Wolf-Meyer 2024), as well as the correspondence in *Improvising theory* (Cerwonka and Malkki 2007) helped me to find the way how to note and structure my fieldnotes. They gave me an idea on how to approach the process of jotting down and anchoring my observations, sensations, thoughts, and memories into a massive of written and visually documented data that I could navigate, understand, and work with.

Meanwhile, for interviews I mostly relied on the voice recordings, noting down only some comments or references in the notepad, to follow up on during or after the interview. During interviews, after receiving the green light from the participant, I started the recording on my phone, keeping the phone on the table or in sight (with locked, dimmed screen), so that it would not be too intrusive, yet also not too hidden and the person could also see whenever the recording was paused, resumed, or ended. In 3 cases when the interview could not be held in person, I used *Zoom* platform for videocall and its built-in call recorder. The recording feature had a similar effect, the beginning and the end of each recording was announced by the system, informing both me and the participant that the recording is on/off. Two of interview participants also noted that they appreciated this sense of control, knowing when the recording is on.

In total the fieldwork was planned for 3 weeks, covering working days, as well as some weekend days. It resulted in 19 days spent in the field, yielding to 155 hours of participant observation time (38k words in digitalized fieldnotes, mostly descriptive), and interviews with 11 research participants (12.5 hours of recorded material). The following subchapter elaborates on the setting of the fieldwork and describes the context of the data collected.

2.2. Fieldwork setting and participants

Considering the local and temporal limitations of this research, I decided on Riga Zoo as the field for this research, so that within the given timeframe I could obtain a sufficient amount of information and data to reach relevant conclusions for the posed research question.

Riga Zoo is located in the suburbs of Riga (Latvia), between an open-air concert venue and lake Ķīšezers, surrounded by and being a part of a forest park Mežaparks. According to the latest public report (Riga Zoo 2022), Riga Zoo is a home or a temporary sanctuary to 3 356 animals (398 species) and a workplace for 162 employees, hosting around 312 thousand visitors a year for the last 10 years.

To enter this field and reach potential research participants, I had to gain day-to-day access to the territory of Riga Zoo and build rapport with the first point-of-contact for research inquiries at the zoo. Considering the internal structure of the zoo, as it was explained to me by the research contact, I also had to gain the trust of the heads of respective departments I was interested in approaching. Therefore, as the fieldwork approached and unfolded, I had to remain flexible and adapt to the changes in my plans, due to availability and trust of the people working at the zoo. For gathering the sample, I used the “snowball technique” (Bernard, 2006, p. 210), using the research contact person in the zoo as the starting key informant and growing the sample by referrals and selected suggestions from the people I met in the zoo.

If at first, I had planned to approach only one zoology department and focus on people who work with one group of animal species at the zoo, then by the end of my fieldwork I had 13 research participants from 4 different departments – including people with various backgrounds, different daily routines and experiences within this zoo and outside of it. Although most of them, at the time of our first meeting, were suggesting that they have nothing to do with the animals in the zoo, my fieldwork data revealed a different image. All participants, in one way or another, took part in what Haraway calls “working with” the animals in the zoo.

Hence, as far as the plan goes, fieldwork took place from 01.03.2024 to 22.03.2024, where I visited the zoo on both working days and weekends, following the people working in the zoo from the beginning until the end of their working day. I have tried to map out my contact-time with the research participants, based on which person was my key participant that day and which of their colleagues were also taking part in most activities on that day. It is presented in the table, attached at the end of the paper, in Appendix 2.

Below is the table listing all 11 interview participants, lengths of the interviews and brief descriptions of their positionality within the zoo. Names of all interview participants have been changed due to ethical considerations; the brackets include an abbreviated version of the changed name.

Table 2.1.

List of interviews with research participants and their descriptions

<i>No.</i>	<i>Participant</i>	<i>Description</i>	<i>Interview length</i>
1	Roze [Ro]	Currently a manager of a team, previously worked closely with animals, caring for their welfare and training. Experience with animal care since childhood.	00:59:33
2	Ausma [Au]	Working at the ticket office, supporting the function of information center. Often visits the zoo with family, too.	00:28:38
3	Laima [La]	Working at the ticket office, supporting the function of information center. Managing relations of local non-exhibit animals. Likes to visit the zoo alone.	01:30:25
4	Marta [Ma]	Currently a manager of a team, previously worked closely with animals, caring for their welfare and training. Replacing animal keepers for a day, if necessary. Responsible for setting the safety and welfare standards within department.	00:41:11

5	Pēteris [Pe]	Tends to welfare of animals, makes decisions on how to carry out routine animal care tasks. Long-term previous experience at animal care within and outside the zoo.	00:46:58
6	Rasa [Ra]	Proposing animal welfare guidelines, organizing research at zoo, supporting educational events, tending to the behind-the-scene and education animals / species ambassadors.	00:28:48 + 00:34:47
7	Nora [No]	Tending to the behind-the-scene and education animals / species ambassadors. Prepares materials about the zoo and animals for educational purposes.	1:16:07
8	Zane [Za]	Organizing educational events, overall educational program within the zoo, tending to the behind-the-scene and education animals / species ambassadors.	00:36:59 + 00:39:50
9	Juris [Ju]	Supporting animal welfare and exhibition decisions, organizing research, previous experience in zoos and animal care.	1:59:36
10	Mētra [Me]	Supporting decisions on animal welfare, visitor education, future plans for the zoo development, organizing research at zoo. Experience with animal care since childhood.	1:52:51
11	Tīna [Ti]	Organizing guided group tours and educational events, tending to the behind-the-scene and education animals / species ambassadors.	37:03

Some days, being in the field meant just observing them and trying not to disturb their workflow. But for the most part it also included assisting them in their daily tasks and learning through how I was instructed to help them out, what I was supposed to know by “common sense” and what were the details they pointed out to me. The activities I was allowed to participate in varied from one research participant to other, but overall I experienced a guided educational tour, communication with visitors at the entrance of the zoo, care and contact with “educational” animals and their “live food”, investigation of the recently deceased animals for their potential uses in educational materials, observation of animal behaviour for research purposes, strategies for ensuring safety of exposition animals against humans and wild animals, organizing and preparing materials for animal enclosure according to needs of the animal, the

visitor and the zookeeper, and planning meetings of the project on how the zoo should look like in the future. For contextualizing analysis, I have elaborated on my experiences in the field by putting together the chapter of Fieldwork Reflections, which cover the observations, interviews and informal conversation in a form of a narrative.

Admittedly, during this fieldwork I met and interacted with more people working in the zoo than I have listed above. By the end of the fieldwork, the number of people who were interested in the research and willing to contribute to it had grown by a lot. Although I truly appreciate it, I also recognize the limits of time and extent of this research. In my fieldnotes and analysis of data I only included those who explicitly had agreed to being part of the research and with which I had managed to spend enough time together, while focusing directly on them.

2.3. Ethical considerations

Before entering the field, we discussed my research ethics as well as the rules and regulations of the zoo together with my research contact. I explained the methods I was planning to apply during my fieldwork and informed them that I am abiding the research Code of Ethics as approved by American Anthropological Association (AAA, 2012), mentioning the key principles – avoiding causing harm to all and any beings involved, being transparent about my research, obtaining informed consent, protecting data and privacy, making results accessible and maintaining research relationships professional. After discussing these with the zoo’s legal counsel, I received a reply that there were no further questions or comments. Beyond the zoo’s internal rules which are presented to the visitors on posters around the territory and published on their website (Riga Zoo, n.d.), I was to follow the instructions given by the employee I would be accompanying.

Considering that people working in the zoo respond to internal manager-employee hierarchy, I made sure that even after the person in the managerial position had “cleared” my access, I made sure to receive individual informed consent from each person I invited to take part in the research. If anyone felt uncomfortable with being part of the research, I respected their decision. The same principle applied to meetings to which I was invited to as a companion of the person I was observing on that day. When I met new people or joined a meeting with people beyond my research participants, I briefly introduced my research and included them in the notes only if they had agreed to it.

I noticed that the fuchsia-coloured notepad had an interesting ripple effect, and it became a marker for me and my status in the zoo. People pointed out, with emphasis, that I am “that researcher with *the notebook*”, many asked me what are the things that I keep noting down.

While for some research participants the notebook seemed to remind them about my research and pause on some comments, for others it encouraged them to share more of what they believed I needed to note and take into account. However, it was not my goal to hide the note-taking process or my position as a researcher; therefore, if I switched to taking notes on my phone out of convenience, I let them know that I was continuing to take notes there.

Additionally, I had to consider confidentiality of my research participants, in respect to the internal knowledge shared between some, but not other colleagues within the zoo. Although there were some comments and questions about what I had learnt from “other” departments on particular topics, I respected their individual privacy and avoided the messenger’s role. The only exception was a case of internal rule misconduct which I pointed out to the head of the department, due to outweighed ethical considerations against the parties involved. However, considering the sensitivity of the case, I have decided to omit further details from this research.

On the matter of data and its confidentiality, some of research participants expressed concerns for anonymity, since there is only one zoo in Riga and only a few people in some of its departments, people can be easy to identify. Respecting their concerns and following ethical research guidelines, both in my physically and digitally recorded fieldnotes I never used surnames and avoided using full first names, using acronyms instead. Later on, when preparing data for analysis, I swapped all names (and acronyms) in my notes and transcripts to pseudonyms. Additionally, as I am not using the role of age or gender as axis for analysis, I have avoided singling out the responses of those represented in minority. Instead, I have used the gender-neutral pronoun “they” in both individual and collective uses. Considering the sensitivity of the cases discussed with the research participants and the relations at workplace between them, I deemed these measures sufficient for the scope of this research.

Furthermore, for ensuring data protection, all the digital notes and interview recordings are accessible only through password-protected devices and are stored on the personal student cloud of university-provided *Microsoft 365* account. For backup, I have made copies of the interview files, transcripts and digital fieldnotes and stored them on an external hard drive, which is also password protected.

For processing, preparing and analysing fieldwork data I used *Microsoft 365 (Office)* products, including *Transcribe* – a part of *Office Intelligent Services*, a cloud service providing computer-assisted transcribing in Latvian and English – and *MAXQDA Analytics Pro* for coding and data analysis. I made sure to check that all of the used software have reliable cybersecurity measures and promise data security while storing and operating with user-added data.

After the end of the research, the hard drive copy with fieldwork materials and notes on analysis will remain in my archive, should it be needed for future research, however, the cloud

copy, the data on previously mentioned software storages and the physical fieldwork notes will be safely discarded.

2.4. Researcher's positionality

Beyond the position of a researcher, I recognize that the data I could access and collect was dependent on my cultural and social positionality. During the fieldwork multiple participants asked me about my age, marital and family status, distance from my home to the zoo, my language skills, my previous experience in working with animals, my education level and previous experience with anthropological research and so on.

While on some occasions it seemed like it was done out of curiosity about me as a person they are about to spend more time with, sometimes my response was met with a conclusion or a statement by the participant and a story that seemed adjusted to my response. Sometimes it seemed like a test to validate their previous assessment on what I would or would not understand due to my positionality and previous experience.

Considering my positionality towards the theoretical categories further explained later on in the theoretical part, I noticed that my attitudes towards the concepts and imaginings of society, culture, nature, climate, wilderness, conservation, environmental education and even zoos has changed throughout this research. I concur with the scholars cited below that there is a crisis, simultaneously local and global, to be considered and that the Anthropocene, acknowledgement of it, careful interpretation of it, should inspire change, action, and activism. And I also share the view that biodiversity of species is inherently good and the overuse and exploitation of irreplaceable (or hardly replaceable) resources, as well as the view of all “things” beyond human as resources to be used up by humans for capital gains, is not good.

Similarly, as I later noticed in the interviews, I also have memories of visiting the zoo as a child, I can recall specific animals and attitudes I had at the time and how those attitudes transformed with time. I have internally struggled with the ethical aspects of human-animal interactions in a variety of contexts (pets at home, cats, rats and seagulls in the streets of Riga, dogs on a leash at country-side homes, circus shows, pet shops, conservation parks, “caring” for a “lost” hedgehog who is visiting the garden, etc. the list goes on) and I did have some of them at the back of my mind during the fieldwork and analysis of the data.

Especially this concern came to my view when I noticed that day after day of being in the field I returned home to be greeted and sniff-inspected by my tabby cat named Švīka. While she investigates the scents, I most probably have carried back home from the field day, I am blind to the knowledges it might bring her, yet I am very used to the practice of interpreting

what she might be thinking, feeling or planning. As the topic of this thesis regards the categories of nature, domestication, care (in all of its positive and negative forms), as well as conservation as a tool for determining value of the species, I am keenly aware of the privileges that I carry by having her as my companion, and my being hers. Thank to the numerous interactions we have shared over the course of writing this thesis, I have had multiple reflection points. Therefore, I have also included her in my acknowledgments, with her I believe that I now see her and individuals of different species with slightly different eyes.

However, I have tried to best of my ability to acknowledge these aspects of positionality and to spot whenever they affected my process of thinking, my mode of questioning and approach to this research. While I do not strive for unrealistic objectivity, I have put an effort in conscious openness to thoughts, beliefs and lived experiences other than my own, to gain insights beyond my own worldview and position in the context.

2.5. Limitations of the research

The access to the field and trust of research participants was gradual, as I expected. I was warned by people from multiple departments that the people working in the zoo do not have previous experience with this sort of research where it is them in the focus, instead of the animals or the visitors. The people I talked to often tried to redirect me to the “specialists”, “media spokespersons” and “experts”, and during the first week, whenever I asked anything animal care related, I was suggested that I should ask this to the animal keepers. At the same time many expressed doubts on my chances to talk to them, saying that they are very private and keep to themselves. On the first department management meeting my research idea for participant observation in zoology departments (or mostly observation from a safe distance and combined with an interview) was rejected with list of various reasons and risks why they thought it would not work well. Respecting organization’s hierarchy, I did not approach the zookeepers. Instead, I turned my focus to other departments which fully agreed to take me in.

Towards the second half of the fieldwork, my paths had crossed with some zookeepers and heads of zoology departments over some meetings which I had attended as a companion for my research participants. Some of them took interest in how my research is going and how are the people in other department doing with my presence (to which someone always joked that so far, I have bitten 0 of their colleagues). I decided to approach one of them and repeat the request to join them for a day or two. Apparently, there had been a misunderstanding and at least for this department, they were open to me joining them, as long as I would not slow them down and would not be afraid to get some dirt (and manure) on me. Therefore, this limitation

was mostly weighed out by broadening my view of the field. Most likely, without the initial rejection, I would not have met so many people from different perspectives, with different experiences.

However, among the limitations that I could not dissolve in this research, I can note that some of the experiences shared with me on the field I could not fully understand and note down due to my language barrier. Most of the communication was in Latvian or English, so being proficient in both of them granted me access to this part of the information field. Yet there were some conversations or a couple of phrases shared in Russian, more rarely in Lithuanian, where I could only vaguely guess the topic. Without intrusions or requests to translate it, these conversations were not accessible to me.

Furthermore, the language aspect resurfaced also at the analysis stage, where the software which was the most suitable for the needs of this research, could not process text in Latvian to enable the features which regard the dictionary-based corpus analysis. While it was not crucial for the scope of this research, it definitely should be an aspect to consider for further research.

Another limitation was that the period over which I carried out this research at this field is considered the relatively quiet time – the winter season. The visitor hours are shorter, so the working hours of zookeepers and people working at the ticket office are adjusted accordingly, shortening the time I could spend with them at their work environment. Although I had decided to research them beyond their professional expertise, I did not wish to extend the field to their personal space outside the territory of Riga Zoo.

Lastly, the unsurprising and expected timeframe given for this research turned out to be quite challenging for my time management skills. For further research even more time should be allocated for any unexpected events, as in this case, for replanning of analysis and restructuring of the coding system. With more care and attention, I believe that the collected data could yield even more useful insights into this topic.

To summarize the chapter, the research of this thesis draws insights from the fieldwork carried out in Riga Zoo. As elaborated on above, informed by ethical and safety considerations, I used semi-structured interviews, participant observation and informal conversations to get familiar with the field and the people (and their companion species) living, working and interacting in it. The process of research is truly an art and skill to be continuously practiced and honed, as there are limitations I could work with better in the future. Consequently, the following chapter will lay out the context of this research at Riga Zoo, which pairs with analysis of collected data in the subsequent chapter, contributing to the situated findings.

3. FIELDWORK REFLECTIONS

The first time I stepped in Riga Zoo with this research interest in mind was in October 2023, when I was introduced to the person who would later remain my key contact person for navigating Riga Zoo's internal employee community. Once the research question was set and legal, ethical and safety limitations (principles matching the previously mentioned research ethics) discussed, I received a permit to be in the zoo for March within the visiting hours, as well as outside and beyond them, as long as I am accompanied by an employee who participates in my research.



Figure 3.1. Picture with the tiger *Panthera tigris altaica* named Augusts (above) on the poster and the cat *Felis catus* named Bosītis (below) drinking water from the pool. Author's archive.

Being at the zoo did feel different as the days went by, as I got more familiar with my surroundings (sights, scents, patterns of naming and mapping, etc.). I found myself discovering more and more new details and continuously was surprised how many of the things I used to notice as a visitor became invisible to me by the end of my fieldwork. Therefore, I have included

this chapter as a summary of the aspects that have situated my perspective and understanding of the findings I present in the consequent chapter.

3.1. A day in the field, in Riga Zoo

Day in the field began around 8-9 in the morning, when I arrived at the zoo, heading to the meeting point with the person I had agreed to tag along for the day. This description, synthesised from my fieldnotes, will follow a day with zookeepers where I actively participated in their daily routines, learning while in action, notetaking whenever my hands were free and relatively clean again.

The day begins with the morning coffee and chitchat among colleagues who are on duty for the day. They explain to me that here it usually takes 2 people, not because 1 person could not do it, but because of safety and animal wellbeing. They inspect the latest memos written in the local journal – a notebook for tracking weather, animal wellbeing and any specific occurrences. Then we change into the layer of clothing that can take a layer of dirt and bacteria and, as I soon found out, absorb the surrounding scents.

After the coffee, a careful cycle of careful begins. All of the zoo's animals in the territory assigned to this department have to be fed, all enclosures public and hidden from the public have to be cleaned out and sorted before the visitors arrive. In this department, all keepers go in and out of enclosures fairly freely – the main precautions are keeping the animals in sight, keeping the entry gates closed, and not going too close to the behind legs, if the animal has a powerful kick, or being careful not to step on the smaller animals. Firstly, I help to fetch the water bowls from animal enclosures, trying not to frighten the animals, as I approach. On the first day I was instructed with “it's ok, just go in, they are used to it”. And after a while, as I watched them greeting the animals, talking to the animals as they worked, I found myself doing the same and feeling safer by it. Even though externally nothing had changed to safety of it.

Then the breakfast dose of food is distributed. All the food is rationed in the local department's “animal” kitchen (separate from the kitchen where they make coffee and heat up lunch). The granular supplement is organized in big plastic boxes and buckets, each of them with a label written across the sides and the lid. Among them I notice that some are named by the species common name, but one “Kriksītim” is named by the pony's name. The keeper explains that he is dear to them, he is very old and lives out his retirement here, in the zoo.

After this, we move outside to clean the enclosures. It's cold enough that I appreciate the hat, the garden gloves, and the borrowed employee's winter jacket, however the work of raking the enclosure and carrying heaps of hay is physically demanding and warms me up very quickly.

The keeper instructs me that we need to clean up the droppings of the animals and gather the “big messes” (fallen branches, leaves, dragged out hay, yesterday’s cut up vegetables) so that the enclosure has a clean look. And the hay must be changed so that if there were any droppings in the hay, they would not rot and breed bacteria and other things. A colleague argues that the animals would not eat that hay anyway, but Marta insists that they might and then it would turn out badly.



*Figure 3.1.1. Alpacas *Vicugna pacos* eating hay as we start the daily cleaning. Author’s archive*

As we each take up our side of enclosure to start with, I notice that we hold the rakes and shovels differently. When I point it out, they discuss and demonstrates the techniques they use and what the nuances of movement can do for efficiency, depending on the size, number, and state of the droppings they need to pick up. When I ask, how they arrived to these details, they said that they just watched the others and tried it out. Then they launched into a debate on how for specific animals they recently noticed that the animal was not feeling well, by seeing how the droppings looked like, the colour, the texture, the placement of where they were found, hence, where the animal was leaving them. Sometimes, they noted, it feels like the animal is telling you a tale or showing attitude by placing them in very inconvenient and new spots.

All the removable things (old hay, food bits, droppings mixed with sand) are piled up in a wheelbarrow which then is repeatedly emptied in a collective drop-off point, further away from the visitor areas. When I help to wheel it up and down the slope, I notice how with each time the path mentally becomes shorter, but physically each time leaves me more tired.

As we move from one enclosure to another, unlocking and locking the gates, the keeper sees me fumbling with the lock and says that it seems funny, the animals do not need these

padlocks and keys, a simple barrel-bolt would do. But these keep out the visitors from going in where they are not supposed to. Just like the tight fences around some of the smaller animals are not to keep the animal in, but they are to keep foxes and weasels out.

We keep going and I notice how the animal gaze followed our movements. And the keepers kept greeting them, whenever their gazes met, cooing in calming tones, asking how are they doing and promising that soon they will come to them, too. Some of them seemed to respond, coming closer to the fence, leaning in the touch, if the keeper extended the hand to them. Then to me they noted that they are expecting us to come to them with food.

The preparation of the food entails cutting a variety of vegetables in relative bite sizes and, if the diet requires, adding granulated supplement to them. The volume and the proportion of the specific vegetable sorts is set by the dietary guidelines, composed and regularly updated by the head of department. Throughout these days I notice that each keeper have their own way of cutting the vegetables, as well as their own reasoning for why they do it like this. One says that this is the way how it is easier for him and the animal will eat it anyway. Another one says that they cut them up in these chunks so that the animal can nibble on them, work with the food and get a mental activity along with the nourishment. Another keeper explains that they cut them up like this, much smaller, because the big chunks are not eaten and the animal does not know what to do with them, the bowls are never empty. With these differences, I see how the aims behind the seemingly simple process of feeding differ – to do a task, to enrich experience, to ensure nourishment consumed to the norm. After these conversations I often found myself confused as to what size should the bits be in.

Then, as we set out to distribute the specific buckets of dosed meals, there is a shift in behaviour on how each animal comes to greet us by the entrance gate of their enclosure. Expectant, they push their noses through the fence, rub their sides by it, call out in a higher frequency than before when we came to clean the enclosure. When the animal comes to the freshly filled food bowl, the keeper coos with calming words, beckoning them to come closer, saying how tasty the food is, encouraging them to eat. With a heavier animal, the Latvian blue bull, keepers warn me that he is very excited and can sometimes forget how big and heavy he is and trample you by accident. One of the keepers says that the bull has become very shameless, he tries to poke his head in the food bowl as the keeper carries it and, if the keeper allows it, the bull will start munching on the food and push the bowl lower and lower. So, the keeper explains, you have to carry the bowl in very quickly, keep it high, and step back once the bull gets to it. I notice that the bowls of food are placed in positions where the visitors can see them, be close to them as they eat. Yet places like rain shelters and houses to sleep in are placed further back, to give the animal a quiet refuge, as keepers told me.



Figure 3.1.2. Latvian blue bull playing with enrichment element. Author's archive

When we get back to the food kitchen, it is time to do another round of cleanups, for enclosures to which we did not get to yet. In one of the water containers the keeper finds a mouse. He picks it out, shows to the other keeper, they try to determine how long it has been in there and then turn to tell me that they sometimes get them together with the hay delivery. But the traces of mice are usually visible by bitemarks on packages, cords, and most of all, lines and scents of their droppings. You can see the mice by where they have been. When I ask, what do they do with it, the keeper replies that they try to poison them, but they must be careful, so that does not affect other animals. These mice, they explain, are not suitable for feed, for other animals, because we don't know what they have eaten before, what illnesses they might carry. The feed that we grow, for prey birds, for lynxes, we know what they eat and if they get ill.

In a bit, when we move to cleaning the enclosure for chickens and the rooster, one of the keepers shares the story of how sometimes visitors bring animals with them and leave them with the zoo animals, despite the protocols, despite that they have to spend time in quarantine.

“One time someone dropped a house chicken together with the rest, it must have lived in an apartment or something, the legs were very deformed, and it walked odd. Because of it, the other chickens did not accept her. One of the colleagues brought her home. But there was another time when a chicken came from Mežaparks. It just walked around the zoo. I was on duty that day and got a so many calls, asking why one of our chickens is walking around the zoo? I came to see and said – it's not ours. We kept it captured in the horse stables for a bit, but no one came to claim it. So, we gave it for feed. And another time, there was a chicken who was a lap animal. You could call it to you, and she would come over and sit in the lap. You could see that she felt better amongst people than she did amongst chickens. That is sad. That people take animals like that and then throw them out like spare toys.” (fieldnotes)

When we eat lunch, keepers tell me about how nowadays the zoo has access to much more modern granular feeds than they used to, they are designed and produced for the specific species, with the specific cocktail of nutrients the species requires. They also tell me of stories when there was a conflict and another keeper, thinking that the animal was not getting enough of carrots, kept giving additional portions, without telling anyone. It resulted in the animal being overweight and now being prescribed a stricter diet, but the keepers can see that the animal suffers from it, it does not seem fair to them because the animal is not at fault, yet they have to bear the consequences. Yet another keeper told me that for some other animals they sometimes give additional food to make sure that they are full and that they will not eat whatever the visitor will throw in their enclosure. When I ask why the visitors throw food to animals, they reply that it used to be a thing that people did and were not prohibited to do. They recall that they themselves, when brought to the zoo by their parents, bought apples, carrots, and bread to give out to the animals in the zoo, to feed them. This prompts them to share with more stories.



Figure 3.1.3. Crocodile *Tomistoma schlegelii* enclosure in the Tropical house, the directive sign prohibiting visitors from seating children on the railing of the bridge. Author's archive.

One of the zookeepers asked me, if I had seen what they call the “no child-throwing allowed” sign in the Tropical house. When I confirmed, they shared:

“Some years ago, visitors threw in 1 kg of oranges in the crocodile pool. Why, I don’t know. Another time they found one sport shoe swimming in their pool. A month later the crocodile threw up the other one. A kid from the sport school must have thrown them in, it happens from time to time. But the visitors have a good humour, too. While I was fishing some children shoes out of the crocodile’s pool, and a visitor asks me, if I’m only fishing out the shoes or am I planning to pull the child out, as well. Dark, very dark humour. But that sign means nothing, some put their 3-year-old child, feet-first, on the railing (ed. – of the bridge, across the crocodile pool) and then are surprised, if I ask them, if they will jump after the child. By the time I will get around, I doubt there will be much left of that child to safe. 3 crocodiles. That is no joke.” (fieldnotes)

The rest of the day is a mix of cleaning enclosures, cleaning up after the cleaning (sweeping the floors, visitor paths and driveways, where something has fallen out of the wheelbarrows, washing the food containers, lots of washing hands) and organizing the space around the tools of cleaning and feeding. The keepers point out that they do not have a person specifically dedicated to maintaining the infrastructure around the animal enclosures, only when it comes to carrying out more serious construction work. Otherwise, they are taking care of the surrounding territory around these enclosures as if they were their own driveways and as if the visitors would be visiting them, instead of the zoo (fieldnotes). As I noted this, I thought that perhaps this is yet another aspect for the responsibility the keepers experience when tending to their daily routines, as the obligations of hosting the visitors are drawn in parallel to private life. Similar observation reaffirms the idea when we pass the people working at the ticket office, as they are sweeping up the place around the ticket office buildings, as well.

When we return to the animals, keepers often spend some time alongside them, ruffling their fur, scratching them where they say the animal likes it. One of the keepers explains that these are the sort of animals who need the human contact, they are so used to it that it is better for their mental health if you spend some time each day by being in contact with them. What is more, you need to train them:

“You have to train the animals to their care routines, so that they are used to it – stepping in and out a transportation trailer, allow examination, administration of medicine. Or to move them from one enclosure to another as we did today with the goats. All wild animals and dangerous animals must be trained that after a signal they have to move to another room, so that the keeper can safely enter and clean the enclosure. And train to the transportation box, so they experience less stress”. (interview, Marta, pos. 133-135)

Lastly, around 17.30, I change back into the layer of clothing with which I arrived. I no longer can sniff the scents of the day that have clung to my clothes, my hair and even my skin. But as I step in public transportation and arrive home, I have become very conscious of how despite me being in clean clothing I carry a bit of my day around with me. Most of it dissolves with help of a shower and a long cycle in washing machine, but for the boots I wore on those days, the memory of scent lingers even after multiple soaks and scrubs.

3.2. Forms of care beyond the visitor area

In winter season the zoo opens its gates to visitors at 10.00, but for the human and animal beings living and working in the zoo, the day begins with a reference to the visitors. If there are tasks to be done, places to clean, hand-out materials to sort, gates and doors to lock and unlock, the beginning of visiting hours provides the deadline.

As I arrive, I join Nora who has to prepare materials for group tour that will take place later on that day. Each time, when a group of school children are signed up, they go over the materials they will point out and tell more about and prepare the artefacts which they bring with on the tour around the zoo. The artefacts are selected by topicality and suitability for the specific audience, thinking about their knowledge level according to the school curriculum and their attention span. I watch as Nora goes through rows of cabinets filled with labelled boxes and zip-lock bags, placing on the table some bits of wool and fragments of furs. As she picks up one fragment of wool – alpacas wool, as I am told – she plucks it a bit and fluffs it up again. When I ask, what is that for, she says that it is to test if the wool sample is representative, if one can feel and recognize the structure, how it curls up, and tell that it is an alpaca.

The table piles up with more boxes, some are marked with tags like “nails” or “eggs”, but then there is a leg of a bird with a tag, saying “Gailis” (eng. - rooster). Similarly as the sample of wool for the educational purposes is of and represents an alpaca, the leg at the same time as and represents the rooster. Nora tells me that they are called *derivatives*, at least amongst the colleagues. To children they call them – animal parts. The collection is so big that for some of them it is not clear, where have they come from and who has prepared them, but some, the more recently added ones, are from the deceased zoo animals.

On another day, I join her and one other research participant in a visit to the morgue, to collect samples of feathers, fur and other things that need to be prepared for an educational event on birds and the various forms, colours and structures their feathers can be in. The first thing I am warned of is the smell, then I am asked, if I would not faint from the sight and, lastly, as we approach it, I am instructed of the safety measures to follow, to make sure that no unwanted microorganisms would follow us after the visit. There, too, even though the freezer of the morgue held many deceased animals, but also many more parts of these animals, both Juris and Nora traced the animal bodies or parts with references to what they had heard. Which department the animal is from, which animal species, what was their name, if they had one. When we find the animal from which the fur would be collected, Nora quickly and quietly says an apology to the animal that he is disturbed and that they need the fur for this event. In contrast, Juris is joking around a lot, seemingly pointing out that there is no need to be gentle with them anymore, because they are very much dead. The same happened later while they were “collecting” the tail of a wolf, to be prepared as an educational artefact for future lessons. While by no means treated with disrespect, I noticed that he treated the bodies and animal parts as resource with a specific purpose – to represent the species, to illustrate the morphological features of that animal. With care for education.

When the feathers are later soaked and washed, in a discussion with another research participant, they echoed the perspective of care and necessary distance from the individual animal to display the features characteristic to the species. Yet these artefacts have to be prepared for showing and storing with great care, so that they are “clean” and “safe to use”. In other words, free of the living organisms that could inhabit it.

On another occasion I accompanied a research participant who was tending to the animals who are considered as part of the “backstage” of the zoo. If the animals in exhibition are at most times visible to the visitor, these are the animal who are selectively introduced to small groups of visitors for purposes of education.

Previously, they were and sometimes still are referred to as contact-animals, but in the light of the discourse around coronavirus pandemic (COVID-19), anything contact-related was not appreciated by the visitors. Therefore, currently they are introduced as education animals or “official” species ambassadors. Among them at the time of my fieldwork, there are snakes, geckos, rabbits, hedgehogs, turtles, spiders, snails, cockroaches, one degu and one bat. This diverse group of animals are trained, as far as they are willing to participate in training, to be comfortable with people around, with being shown to people.



*Figure 3.2.1. Species ambassador - San Francisco garter snake *Thamnophis tetrataenia*. Author's archive.*

As I repeatedly tag along to the daily feeding and clean-up routines, I notice that each of the participants carrying out those routines have their own approach, sequence and details that they point out to me as noteworthy. One of them begins the day by counting down the animals that need to be tended to and the sequence in which we will be moving across the map of the zoo, to make the “little zookeeping”, as they call it, as efficient as possible. Other participant takes an approach which seems as the opposite of the first, going to the closest of the animals and figuring out what else needs to be done, picked up, cleaned and carried away. The latter also commented in interviews that they thoroughly enjoy this part of the work and if their schedule permits, they will extend the time spent in contact with the animals, training them and making them enrichment elements. As they explain, enrichment element and making of it can be a very creative process, combining the skills of arts-and-crafts to make an object that the animal will benefit from by using the zoology and animal behaviour knowledges that they possess.

At first, with the person on animal-duty for that day, we go to the vivarium – a place in the zoo where the live feed, zoe life, is grown and distributed to keepers. We pick up a plastic bag of small mice bodies and a carton can labelled “ICA cappuccino instant coffee” and a note indicating the department, which hosts a handful of chirping crickets. Then we come back to the animals which are waiting to be fed.

One of these days, Rasa was feeding the snakes and showing me how the smaller ones need the vitamin B supplement, which they cannot just feed to the snake, as people would take it. They need to merge it with the food, so she carefully takes pincers and places them in the jaws of the dead mice. Then she takes the mouse by the tail, opens the terrarium while greeting the snake who is attentively watching the movements, tiny tongue snickering, dangles the mice in short distance of the snake and encourages it to snatch it. “Come on, here it is. Look, how tasty, don’t you want to eat something? Come on...”, Rasa nudges. The snake lunges and in one quick motion grasps the mouse, jaws folding around it, and retracts to where it was lying before. The mouse is three times the size of the snake’s head, but the snake just remains there, barely moving, slightly flexing the jaws from time to time. When I ask, if they always respond to the imitated hunting, she says “sometimes they can be awkward at hunting and then we have to try it multiple times until they get it. But some will not eat the mouse from the ground, they have to feel like they caught it themselves”.

Each of terrariums has a printed label on it, indicating the information of the animals inhabiting it (see Figure 3.2.2.). The top row gives the Latvian name of the species, the second row references the scientific name, the third row, emphasized in bold, has the proper name of the animal. Then, in the last two rows are the optimal conditions for the animal’s welfare, which can be cross referenced with the temperature and humidity indicators in each terrarium. It looks

like these labels frame education animals as reactive organisms who exist only within these specific environment conditions, with a focus on the control over these conditions. Ironically, I later learned that upon being named, the gender of the tarantula was assumed incorrectly. The label remains, but the Tīna joked that the name has stuck so well that she is called Igora now.

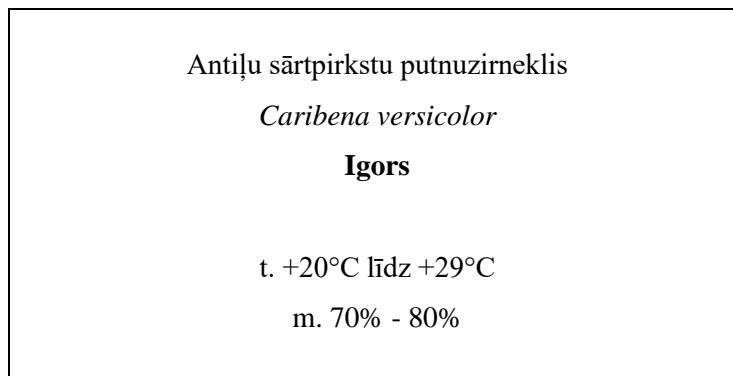


Figure 3.2.2 Recreation of the tags added to most terrariums for education animals. Fieldnotes.

In a neat pile, next to the terrariums, are clipboards, each with one name at the top and a log of activities, one day in each row. I inspect the one assigned to Igoris, the tarantula, and see that in the comments there are notes which read “in the net” or “x”. When I ask about this, Rasa responds that “he has built thick net throughout the terrarium, we don’t want to disturb him. So, when we offer food, if he doesn’t come out to take it, we leave it in the net for later.” (fieldnotes)

I, too, for a brief moment participated in the reciprocal act of care of the elderly degu (see Figure 3.2.3.). When Nora was cleaning up his cage and equipping it with new enrichment elements she had crocheted, she brought him to me and asked, could I hold Degucis so he does not feel so lonely in the transportation box. Immediately, as she placed him on my palm, the degu sniffed my hand, sniffed the air around and burrowed his nose the sleeve of my sweater. And so we sat there like this. When Nora came to collect him, I asked about a myriad of details I had observed, trying to understand if the Degu was scared or tired, or if I had held him right

. She explained to me that he is just old and very social. He is breathing in a rhythm that seemed quick to me, but apparently for his tiny body is a standard. He leans into my palm because it is warm, and the warmth is pleasant. And he bobs his tail when I start speaking either because the sudden noise startles him or because he does not expect my movement that comes with the intake of breath.



Figure 3.2.3. Species ambassador – *Degu Octon degus* named Degucis/ Opītis . Author's archive.

As I handed him back to Nora, I felt how much I had tensed up, trying to accommodate the small elderly being. For those moments I was response-able to his movements and means of communication, yet with projecting human-like behaviours in similar situation (shivering from cold or hyperventilating from anxiety, physically shielding oneself from danger, etc.) I had anthropomorphised and misinterpreted our encounter. Nora calmed me that it does happen, if you do not know the ways of the certain animal. That is, if you care to notice.

One of the evenings I was invited to accompany a couple of research participants in research observations that they would be carrying out, in the zoo. We stayed in the zoo past sunset, when the last visitors had left and the only humans at the zoo were us and the guards. Geared up with many layers of warm clothing, headlamps and tried-and-tested clipboards with pen and paper, we headed out to the enclosure of flying squirrels *Pteromys volans*. The aim is to observe, if at night during the repeated 10-minute intervals the squirrels will exhibit the specific behavioural pattern they are looking for. We switch on the headlights to illuminate the cage, time the 10 minutes and mark observations and then go for a walk, letting the squirrels adjust back to the darkness. During this evening, I was told about many other research projects and proposals suggested to them. For me, the most memorable was that of Partula snail, which is present in Riga Zoo, and reasons for its conservation efforts:

“People are too stupid to predict the future. For example, in the case of Partula. In French Polynesia they introduced giant African snail, I don't remember – as a food or if they escaped... but it was an introduction of this one for some... farming reason, let' say. And the African snail escaped and prospered in the Polynesia and of course, they were destroying the habitat, but also the plantations and the farming, and crops, and things like that. So, farmers decided to introduce a snail predator to reduce the presence of these giant snails. And they introduced the wolf snails, it's this tiny snail, like that (shows with fingers for scale), and their idea was that the wolf snail will attack the giant aust...African species. Wolf snail discovered that in Polynesia was full of terrestrial snails of their side that represent an easy target to be killed. So they attacked the partula. And a lot of species got extinct because of that. There was no interest in extinction of partula, but that happened out of ignorance.” (interview, Juris, pos, 124)

Continuing observations, every time we approached the squirrels, it felt like a request for collaboration. If there was a long pause between any potentially notable action, one of the researchers spoke up, asking the squirrels to show them something, do something. One of the squirrels became especially active, it jumped up and around the cage until it got to a place where the two walls meet the corner of the ceiling and it started doing backflip jumps in between the three points. After around 10 jumps, Mētra noted that it is the one with the “broken brain”, the stereotypical one. At one point Juris jokingly said “dude, you can stop, you are not part of the project anymore”, but later he added that “it is sad, really, what is going on in that little head”. For a long time after this night, I wondered, if that is a form of anthropomorphism or rather a form of knowledge-building through empathy. I am not sure that I have answers to that, so far.

Applying the perspective of string-figures (Haraway, 2016), I saw the interconnectivity of equally responsible, but not equally enabled contributions coming together. While a tour guide at the zoo might tell me that they do not participate in the conservation efforts of a species on brink of extinction, I would like to argue that they do, just not directly. By portraying the importance of biodiversity and the situation of this particular species, they might pull a string in the visitor, another human involved in the happenings of the ecosystem, who will empathise with this and other species who are endangered (often by effect of the anthropogenic factors) and the visitor might, in turn, move the tensions on other strings attaching to human and nonhuman beings. For example, the visitor might become more mindful with their own impact on environment devoting personal resource of their time, money, energy to support those, who are putting in their personal resources to ensure that individuals of a dying out species continue to thrive, and their habitat remains or is recreated to be available for their flourishing. The tour guide enables the visitor to become-with the endangered species. Not all humans in these entanglements will have the same means to make an impact, but all have their loops of the string that we share.

Summarizing this subchapter, a lot of work, effort and thought is put into the care for entanglements of the zoo, all happening from the so-called “backstage” of the zoo. There are more forms of care that take place in management meetings, future redesign project planning

processes, in various administrative check-ups and mundane everyday decisions made that could be further discussed here. They are rendered invisible to the visitor, not to distract from what the zoo presents as “nature”, what the visitor has come to see. Yet these considerations, down to the layout, design and placement of “fun facts” about the species or collection of images to publish on social media, make contributions to the place which functions as a contact zone between humans and animals in various combinations.

The next subchapter follows the developments of Riga Zoo and places the previously discussed perspectives and debates on other zoos in the context of this particular field. Through exploring the perspectives of the “old” and the “new” zoo, I have attempted to gather the key themes that emerged and are later noted in analysis.

3.3. Living and working at times of changes

Riga zoo was established in 1912, and, according to the posters in the zoo and information on their website, the architecture, size and mapping of the territory has changed along with time (Riga Zoo n/d). When inspecting posters in their “Rīgas Zoo laiku lokos”, I noticed that I could see the resemblances of the zoo I saw during fieldwork among the images, new article clippings, postcards and other scanned artefacts from 1908 to 2017. Gradually drawings are replaced by pictures in black and white, then sepia, then colourful images, following the development of technology. Meanwhile in those images views of animals in cages or with cage bars in the background are gradually followed by images with animal close-up, where the background is blurry, indistinguishable and makes one question, if that is an image taken in the zoo or outside of it, in the “wild”.

This turn seems to resonate the literature of the emergence of the modern zoo discussed in Chapter 1.4. – how the need to strictly distinguish the human visitor from the animal obtained, collected and exhibited turned to an attempt to blur the lines and create a more immersive zoo-visiting experience. This was also reflected in interviews and in-between conversations, how much the people who have been working in the zoo for more than 10 years remember what the zoo was like from the visitor’s and from the employee’s point of view. They list that many animals have been moved from cages to larger enclosures, new buildings have joined the territory, some of the old buildings have been refurbished, but for the most part, they speak of the future projects as promises of even further fulfilment of the wish to be modern.



Figure 3.3.1. Old-school cage as an interactive element, the sign reads “Feel like animals did in the zoo 100 years ago / Imagine yourself as an inhabitant of the lynx’s house”. Author’s archive

During a couple of the interviews, the participants pointed out that Riga Zoo is on a similar path as other same-age European zoos – trying to get more fund for renovations, so that it would get a fresher look and be more appealing to visitors, especially those ones who do not have a sentiment towards the establishment. Most of the research participants with less years of experience working at the zoo shared that despite having good memories from early childhood, during their teenage and young adult years their attitude towards zoos was rather negative. Currently, working at the zoo and knowing what is visible and invisible to the visitor, they recognize that the previous perspective was based in emotions, anthropomorphisms and, generally, not informed of the needs of the species and the capabilities of an institution with limited funds. “The zoo truly is doing the best they can with what we have” was a phrase I heard on multiple occasions, and I do not doubt that.

Another theme that continued reappearing is that of the purpose of the zoo. Mirroring the previously discussed shift from menagerie to modern zoo (see Chapter 1.4.), participants were all in agreement that it used to be primarily for entertainment and recreation. Zoo focuses on

the visitor and the ways how they can be entertained with the collection of animals at their disposal. One of them remembered the mixed species enclosure that got very popular:

“A while ago there was a kindergarten of sorts, where all the small animals were put together. They were running there, all so tiny – baby piggies, baby bear cubs, bunnies, baby goats, chickens, all jumping through the hustle and bustle. It was a long time ago, but it was like that. And people always gathered. Actually, if you were a kid, you could not get close enough to see, because you had to get through the line. Small, fluffy, and silly. Running and yelling, screaming, small baby animals. Making a mess, tumbling the bowls upside down. Really cool, like children in the kindergarten. All is understandable, everyone is happy.” (fieldnotes)

Nearly all interview included mentions of near or distant past where the visitors have tried and often succeeded in feeding the animals with what they have brought along with them. One participant shared that if they saw that a visitor has an apple or a carrot, they would allow it, as long as the visitor does not try feeding the animal cookies, candies or chips, because the animal does not need that sugar and salt. On the contrary, another participant shared the story of visitors feeding animal as something that could not be imagined in the current day zoo:

“At those times, everyone was feeding them, all visitors were feeding the animals. That was normal, I remember. We went to the bears, and we had a whole bucket of apples. We went from the visitor’s side, when we were kids. We threw them the apples, but they – they caught them with their mouth. It was such great fun. The bears, Himalaya bears, were sitting like this (ed – Marta straightens and lifts the hand up) and were begging us to... And all, all... for monkeys, everyone threw bread. For elephants, they threw whole bags of bread.” (interview, Marta, pos. 146-147)

Moreover, other participants shared the memory of the horse rides that were offered in return for some additional payment. And some recalled the motorized train that the visitors could board to go around the zoo in a tour. But most, when recalling these cases, pointed out that they have stopped offering these entertainments because they do not represent what the modern zoo and, with that the Riga Zoo, stands for. They rather would like to boost the image of the zoo as an educational institution, a place for research and species conservation.

On zoo’s purpose to educate, there seemed to be a range of interpretations, what it means for an institution, for a material (poster, sign, leaflet) or an event to be educational. For one participant the reference to the Latin name of the species already indicates scientific knowledge and, combined with information about the geographical habitat, life expectancy and facts like that already is considered a contribution to the education of the visitor. In one instance I observed visitors asking, if they can pet or hold a human-palm-sized animal and the keeper obliged, commenting that the others they should not touch, but this one is friendly. Meanwhile, to another participant, an educational effort entails a curated experience of multiple mediums for knowledge consumption. A vivid example can be seen in the change in policy for the events where the species ambassadors, previously called contact-animals, can be involved:

“We have a condition now, for our education animals, we don’t give people to hold them. And we don’t give them just so they can take a picture (ed.- with them). The animal must... it’s mandatory, the animal must be shown in an educational context. Like, you have to tell them something about that

animal, even if just a little bit, but you can, yes. (...) Recently, a colleague reached out to me and said that there will be a bachelor's party and they want to arrange a picture with a big snake. And I was like, no. Absolutely not, it's against our guidelines! You can't do that. They must book a group tour, an educational lesson or something like that. And even then, about hold the snake, we won't do that." (interview, Zane, pos. 187-188)

When I inquired about the shift, what had caused it, besides the juxtaposed purposes – to entertain or to educate – research participants also said that in those encounters there is no benefit for the animal. Sometimes it even risks the opposite, causing harm to the animal by being wrongly handled, dropped, squeezed, etc. And, the overarching concern, is letting them get used to this human contact and adjusting to expecting it, which would “mark the animal's domestication and potential departure from their natural behaviours” (fieldnotes).

One of the participants shares that it used to be a very common practice, but now it is frowned upon and goes against the guidelines for maintaining animal welfare:

“We had a colleague who went in the coati enclosure and held them in his arms, and by doing so, he domesticated them, they grew used to him. And then he abandoned them, they have a real emotional trauma from it. They have become aggressive and scaredy. So, yes. It's terrible and things like that, you cannot rely on them. So, it's always best to just avoid going in the enclosure, you are not supposed to go to the animal. Never. Should just let them be.” (interview, Zane, pos. 125)

To summarize, it seems that there is still a gap between the schools of thought in the zoo about the practices regarding animal care and welfare, since different research participants had contrasting ideas on what it means to ensure the right sort of care for the animal. The guidelines for the modern zookeeping are the same, but at times they seemed to conflict with the long-standing practices based in the person's experience at the zoo. Similarly, as with the gap on understanding what should be the standards and forms of educational and research activities, the zoo accommodates multiple timescapes while navigating the co-existence (or conflict) of those practices within one territory, one multispecies contact-zone. As the zoo's histories bring shame to some and pride to others, it illuminates the fragmented internal agreement on how the animals and the animal care should be perceived and acted upon, which in turn can reflect on the perspective offered to the visitor.

4. ANALYSIS AND FINDINGS

Based on the research question, theoretical concepts discussed before in the Chapter 1, and the patterns I began to notice throughout the fieldwork, I developed a code matrix which guided my analysis. In this chapter, which is constructed in four subchapters, beginning with an elaboration of the system of codes I used for tracking and retrieving useful data segments and brief review on comparative frequency with which they were applied in the corpus. Further on, I have gathered the results of the analysis, complemented with most noteworthy findings, situated in the contexts which I have laid out in the previous chapters. Although this set of codes proved to be useful for the scope of this research, there are adjustments I would suggest, which I have pointed out in reflections and future research considerations.

4.1. Coding the fieldwork data

The total volume of corpus for qualitative analysis was comprised by 11 transcribed interviews and my digitalised fieldnotes of 38k words. For analysing the fieldwork data I used a code system, based on the underlying questions I posed along with interview guidelines and additional markers I spotted along the way and added in-vivo. Below is the full list of codes used in this analysis and their explanations, which I used as Codebook.

Table 4.1.1.

Table of codes and their descriptions as used in fieldwork data analysis

<i>Code name</i>	<i>Variables</i>	<i>Description of the codes (by main code)</i>
ZP	E = education, C = conservation, X = entertainment, R = research, O = other.	Zoo purpose – in theory, for any zoo, what is the role of a zoo, what are the aims, the functions in nature, in society, also, how have they changed with time and contemporary expectations.
RZP	E = education, C = conservation, X = entertainment, R = research, O = other.	Participant’s experience, in case of Riga Zoo, what are the roles they see the zoo in, actions which point towards the participant recognizing the functions of the zoo or changes of them.
Ex	C = colleagues at zoo, V = people visiting the zoo, H = other humans (excl. C&V), Ae = exhibition animal, Ac = contact-animals, education animals, ambassadors. Af = feed animal, zoe life, Av = animal visiting the zoo, Ao = animal other (escaped, involved in an event, etc).	Person working at the zoo (employee) and their relationship with other beings at the zoo – human and companion species, depending on their situatedness and perceived qualities. How the assemblages are formed around the employee.

A	I = animal as individual, S = species representative, C = animal as collective idea.	Participant referring to one animal as a distinguishable individual or as a representative of species, or a collective of individually indistinguishable animals (i.e., amphibians, the popular animals, visitor dogs).
Con	N = nature, naturalness, W = wild, wilderness, S = safety and threat, C = care, acts of care, MZ = what is a modern zoo.	Participant sharing with thoughts on concepts of what it means to be (in), see or feel nature, “the wild”, how concepts of safety and threat come across in storytelling, what is the role of control, what acts of care the entanglement demands.
B	ZgA = zoo gives animal, AgZ = animal gives zoo, AgV = animal gives visitor, VgZ = visitor gives zoo, VgA = visitor gives animal, ZgV = zoo gives visitor.	The exchange and the balance of the contact zone, what is given and what is taken in this meeting point at Riga Zoo. In this case, since research participants used “zoo” in this sense, people working in the zoo are considered as part of zoo, while animals are not always included in the term.
Ind	B = behaviour, attitudes, T = thinking and judgement, N = names and name-giving P = placement in time and space	Individual animal’s characteristics, agency, level of personification, where they are placed and/or where they should be.
S	Conflict situations Zoo memory Other-	Additional code for specific situations, which I wanted to mark, to return to at the analysis stage. In-vivo added – conflict situation when the participant is struggling with a dilemma or explaining a situation which they cannot make sense of. For zoo memory – whenever a story is told of the zoo that no longer is, past experiences.

The text analytics software MAXQDA helped me to organize the codes, gather the coded segments by the overarching category and by code, as well as it offered to compile quantitative statistics on the particular code trends and clusters, sorted by document.

During the analysis I noticed the uneven distribution of the codes which I did not feel so vividly as I was immersed in the coding process. When I reviewed the report on frequencies and clusters of segments coded by multiple codes, I saw that there was a trend in code combinations. This also became more visible when conducting qualitative analysis of the retrieved segments, often the reports between some codes looked very similar. However, I used the cross-referencing to identify the parts which did not overlap, to gain an insight.

For a visual representation of the clusters, see the image (Figure 4.1.1.) from MAXQDA report on intersection of codes within a segment, where the maximum distance for codes within the same document is set at 3 paragraphs. Nod colours are grouped by the code category, the font size of the code indicates relative frequency (also indicated with the number, in brackets).

connections I have noticed in their interview responses, through their storytelling, acts of care, control, and protection, etc.

Notably, at first, I debated whether to include zoo – the institution – and the Riga Zoo – the place – as actors with their own limbs, partaking in the assemblages and the string figure game. However, I have decided not to include “zoo” as its own entity because it would open up more tangled and loose threads, shifting the focus to a larger scale and the biopolitics at play. For the scope of this research, I am focusing on the assemblages, where the person working at the zoo, category of my research participants, is rather directly entangled in.

The points holding the ends of the SF game in this context are my **research participants** (people working at the zoo), **their colleagues** they interact with (either directly or indirectly, including the colleagues they imagine, as the theoretical people working at the zoo, with their responsibilities, qualities, lazy moments, etc.), the **people visiting the zoo** (again, this is an aggregated category, both the specific visitors I witnessed in person and in their stories, and the theoretical idea of the visitor or often the representation of humans as a wider group, with their interests, beliefs and behaviours), the **animals in the zoo** that can be identified and differentiated more or less as individuals, or persons in Haraway’s (2016, p. 103) terms (aggregated – animals in exhibitions, animals in the background quarters, animals visiting the zoo, etc., but most often these are the animals in the zoo’s official registry), and **animal species** (as collectives, specifically defined groups of animals either in the zoo or beyond the territory of the zoo). For a visual representation, see Figure 4.2.1.

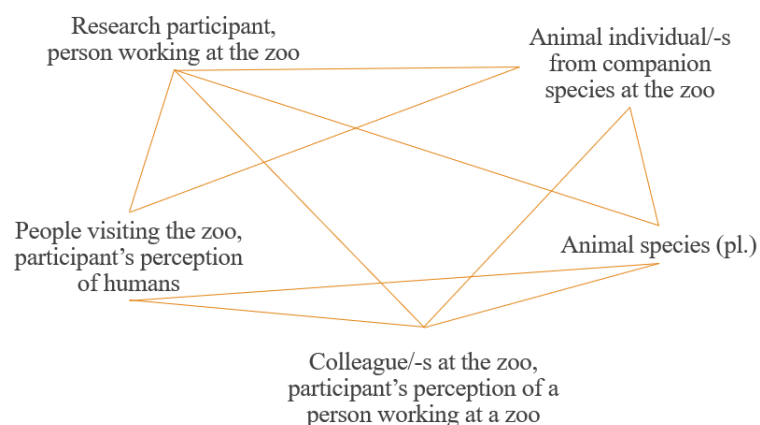


Figure 4.2.1. String-figure of the persons involved in the entanglements at the zoo. Author’s archive.

There are many ways how these relations could be grouped, organized, and depicted, but I decided to use this setup to focus on the perceived balances in the contributions of these relationships. In other words, how people working at the zoo saw, experienced, and understood

the reciprocity of these ties between these points of SF game. The emphasis is on the interconnectivity within the contact zone.

When looking at the Codebook (see Table 4.1.1.), these SF relations are directly depicted in the codes under *Ex* group (personal, lived experience interactions) and indirectly under the *B* code group (observed, understood interactions). Together, the marked segments depicted research participant’s thoughts and experience of what is given and what is received in these contact or conflict zones. The act or artefact of giving could be either relatively positive or negative. I.e., the act of human visitor giving the exhibition animal an apple could mean that the animal receives a snack, nourishment, and positive attention, yet it also could mean that the animal’s planned diet is being distorted, the animal along with apple receives a new assortment of microbes or fungi, a change in the familiar routine and an expectation for another apple in the future. Hence, these acts of exchange should still be viewed as a part of a larger context.

Lastly, during analysis I recognized that many of the stories told of the conflicts within the contact zone of the zoo included the chain of events or, in string-figure sense, the thread that connected the people from one action to the other, causing the interconnectivity to suddenly become visible. Using this as one of the examples, I repeated the analysis of some parts of the data, tracing the multispecies relations.

The following subchapter discusses these multispecies ties from the vantage points of the persons included in the Figure 4.2.1. and draws upon the concept of Haraway’s string-figures to make sense of the entanglements in the contact zone of the Riga Zoo.

4.3. Balance and reciprocity

The key of symbiotic assemblages and “being with” is in the changing turns of giving and receiving (Haraway, 2016, pp. 10, 173). This subchapter attempts to untangle the directions and intentions behind these exchanges to gain a better understanding of the ethnographic accounts from an analytical approach. While the “ultimate” balance is not the goal, I still would like to use the idea of relative balance as a reference point for mutuality. The explanations of each code, as it was used in coding of corpus, can be found in the Codebook (see Table 4.1.1).

Table 4.3.1.

Table of summarized coded segments for code group B

<i>Code name</i>	<i>Sub-variable</i>	<i>Summary</i>
Zg A	What the zoo gives to the <u>individual animal</u> :	- Chance to be alive despite endangerment and unlikely survival in the wild, - Home to get used to, zoo as a refuge place where they are not hunted for trophies, eaten, exterminated as vilified pests or collateral damage,

		<ul style="list-style-type: none"> - Zoo as contact zone for meeting and mating with other species individuals without human-built infrastructure (roads, cities, fences) limiting them, - Name, defined personality, fame, - Respect (in life and death, even as a derivate for education) - Conditions for optimal life, access to healthcare, safety due to controllable conditions, - Traumas, if conditions are not suitable, - Planned diet and food that they will not have to hunt, - Training to respond to humans and collaborate in their care, - Enrichment elements that simulate wildlife habits, - Love, care and affection from the zookeeper, - Chance to “help” species in the wild by being ambassador and participant in breeding programs.
	What the zoo gives to animal <u>species</u> :	<ul style="list-style-type: none"> - Hope for future population, for reintroduction, - participation in research projects, - Flow of spectators is directed to zoos instead of natural habitats, species are not traumatized as much, - Exposure to existence of less popular species.
Ag Z	What the <u>exhibition animal</u> gives to the zoo:	<ul style="list-style-type: none"> - Attracts visitors who pay the ticket, generate income, - Provide keepers with experience, how to work with species, - Reason for the zoo to exist, - Chance for zoo to participate in international conservation projects, gain knowledge, experience, networking contacts, - Materials for education (fur, hooves, antlers, skulls, tails), - Sacrifice of being captive to attract attention to other species in the zoo, - Injuries, if the keeper comes to unrequested physical contact, - Chance for the keeper or the zoo to give a name to someone, - Status to the zoo that the zoo can obtain and keep the species.
	<u>Ambassadors</u> :	<ul style="list-style-type: none"> - Calm down the keepers, colleagues who interact with them.
	<u>Visiting animals</u> :	<ul style="list-style-type: none"> - New microbes, fungi, viruses, illnesses, - Stress for the exhibition animals.
Ag V	What the animal gives to the visitor:	<ul style="list-style-type: none"> - Positive emotions, energy, excitement, cuteness, honesty, - Chance to see something exotic, unusual, - Chance to look at something alive, live movement, - Moment of connection, eye contact, being seen, - Injuries, if the visitor comes to unrequested physical contact, - Chance to see the natural behaviour (hunting, moving, giving Birth, dying, interacting with others), if the contact time and place allows, - New experience, knowledge, a new topic to talk about, - Visual representation of biodiversity.
Vg A	What the visitor gives to the animal:	<ul style="list-style-type: none"> - Their presence is an enrichment (for some animals), - Names and personality descriptions, - Stress, fear, discomfort because of the noise, scents, angle of the viewing platforms, visitors knocking glass, poking animals, - Something that is thrown in the enclosure, something the animal might eat.
Vg Z	What the visitor gives to the zoo:	<ul style="list-style-type: none"> - Source of income, by tickets and donations, - Legal grounds to be called a zoo as an educational place, - Fun situations, interesting interactions that boost the day,

		<ul style="list-style-type: none"> - If they give good (direct/indirect) feedback, people working at the zoo feel appreciated, valued, motivated to work, - Data for nature tourism/ consumer research, - Their commitment to spend time at the zoo, acknowledgement of the zoo and their role, - Garbage, both in the intended (trash bins) and unintended (enclosures, shrubbery, around the zoo territory) spaces.
Zg V	What the zoo gives to the visitor:	<ul style="list-style-type: none"> - An escape from the city routines - Chance to get an energy boost, good emotions, - Moment of connecting with your family, quality time together, make the children happy, entertained, - Place where to meet with the animal, meet with species, which might or might not have been known to the visitor, - Vast territory of nature, another ecosystem, clean air, trees, - Venue for celebrations and parties, picnic with lake-view, - Knowledge to understand what they are seeing (which animals, their behaviours, context of that species and habitat), - Tangible ways of connecting to animals (samples of animal parts, given during the guided tours to see and touch), - Space to share with and consume nature-friendly knowledge, advertise sustainable solutions, sustainable lifestyle.

From the codes in the Table 4.3.1., all research participants had their theories and ideas on what the zoo, including themselves, provides **to the animals**, what the **zoo provides to the visitors**. When the animal is on the receiving end, participants tended to intertwine their comments with themes of care, responsibility towards the individual and the species, and control of the threat (in all instances – human threat).

“One of their options is to continue living here in zoos, because, well, they have accepted this life as it is. They don’t know any other. So they can survive here. And for us, in turn, we can see them all right here and we don’t need to go in the wild, catch them, look for them or hunt them down. Here they are, we come to the zoo to see, let’s say, a lion, we see an antelope, giraffe... very good, for a good part it takes away the need to go and stomp around the place where they live. We don’t traumatise them in the nature. But those animals who are born in another zoo, we can’t traumatise them, they are already used to humans, here they see the same visitors walking around them.” (interview, Pēteris, pos. 53-54)

On the aspect of care, often human sacrifice and effort is emphasized, as in this example:

“The work of the keeper, it is a tough work. Physically it is extremely demanding, because when it is minus 20*, you are outside, cleaning the animal, when it is raining, you are outside, cleaning the animal, when its plus 30*, you are outside... Christmas? Animals don't celebrate it, they need to eat and be cleaned.” (interview, Juris, pos.89)

However, when the visitor is on the receiving end, from an individual at most cases they become the mass of visitors, a flow of visiting human representatives – to be educated, informed, maybe also entertained and given stories of well-spent time, so that they would pass on the idea of a zoo visit to their friends, family, co-workers. As receivers, they become the channel for zoo’s to access wider society.

“The visitor gains insights and, they gain that they might start caring for the animal. Like, they noticed that the animal saw them and have somehow through oneself reflected it. That this bird kas

eyelashes, just like me, and through them they looked in my eyes, so I empathize with the animal. Their sad gaze is relatable. They will remember this and talk about it to others.” (interview, Mētra, pos. 17)

In this perspective, the human representation seems not unlike the representation of animal ambassadors (discussed in Chapter 3.2.), where education animals are used as a connection point to other individuals and species who share similar histories and potential futures, but by sharing the morphological characteristics, they are available to human touch and gaze, available for a direct contact. Just like human visitor is there, a tangible contact point for multispecies beings living and working at the zoo to entangle with.

A lot of them stumbled on the question, what is it that the **visitor gives the zoo** beyond the financial aspect and what the **visitor gives to the animal** or what do the zoo animals receive from visitors. Only three people elaborated on their responses, but most either were unsure or said that there was nothing to be received. For example, here is the segment from one of the interviews, where the positive and the negative contributions of the visitor are noted:

“Visitor gives income to the zoo. (...) I say this because a lot of keepers say that they don’t need the visitors. Visitors often thrown something in, where the animals are, animals eat it, it’s bad. Visitors need to bang the windows, scare the animals, animals can flee, injure themselves while running away... if you ask the keeper, they don’t need these visitors, anyway. Really, it would be better without them. But the keeper can’t go on without these visitors because they pay for all that is important for us. For the zookeeping, for the feeding... and the biggest part of the expenses is comprised by the wages and social guarantees for all the employees, and only then comes the rest of it. So, if everything were motorized... if we only had to pay for electricity, then maybe we could have less. But the visitor is needed to keep up the zoo. And the visitor is needed so that the zoo could exist with the name – zoological garden, because by the definition, it needs to be open to the visitors at least 7 days a year.” (interview, Roze, pos. 97)

When the zoo is on the receiving end in animal-zoo linkage, all participants, unsurprisingly, stressed the dependence that without (all) animals the zoo would lose its meaning, in the philosophical and very material, financial sense. As one of them summarized: “They are our... our lives, our animals. They are the essence and soul of the zoo. They attract visitors, that is the business on which we live on.” (interview, Marta, pos. 99-101)

Additionally, some mentioned that there are differences between the animals and their respective qualities or belonging to categories can mean different contributions to the status of the zoo. I.e. for Belgium the okapi are a symbol of their zoo’s identity due to their connections to colonial past (fieldnotes, Mētra). Meanwhile, in the eyes of other zoos, certain animals can hold the status of trade-tokens for advantageous animal trades between the zoos. And in the eyes of the visitors, it matters if the animal is cute, charismatic, attention-grabbing, which often determines which animals are being planned and “managed” to curate the collection (fieldnotes). Therefore, zoos are ready to investment in acquiring these species of animals:

“for some animals the zoo is ready to pay rent, like for the giant panda. From China, it's one million euros per year, per animal. And you don't have the ownership of the adults, if you have a baby, all the babies are the property of the government of China. When they are two years old, they come back

to China, end of the story. Some zoos are ready to pay two million euro per year because they know that what they have back in merchandising and tickets sold, it covers this cost.” (interview, Juris, pos. 112-113)

Furthermore, the animals who came to visit the zoo for a brief time, but without causing significant ruptures in the daily routines of the keepers, were barely mentioned. Although I every day I noted them and they did come up in informal conversations or anecdotal examples shared between the colleagues, they were not mentioned during interviews, unless I specifically sought out their opinions on them. These animals include the local fauna, both domesticated and wild, if the categories are used. The most prominent example seemed to be the local cats:

“There are only two places where they are still left now, those cats. There are those two, with stripes, what were their names... I don't remember. And then there is that black one. But that one is very... well... he is coming from somewhere but here he comes in, goes to the house where we kept the horses, crosses over the street and the... somewhere the hell away, He is very... well, you cannot rely on him to be here. We have some cats who are living in the zoo, but they are not of the zoo, they are not zoo's cats. They come from somewhere, probably belong to someone.” (interview, Pēteris, pos. 119)

Lastly, there were a couple of contradictions I spotted when cross-referencing with the code that marked segments displaying a conflict of thoughts. One of them repeatedly notes the ethical dilemmas research participants struggled with, continuously weighing out the contributions the zoo is offering to the animals, the sacrifices of the individual, the gain of the species and the justification that the zoo is doing this to outbalance the anthropogenic footprint in habitats of these animals. By presenting the windows to habitats and species living in the wild, the zoo attempts to render invisible the individual histories of the animals that are put on display (fieldnotes). And, at the same time, sometimes the ethical considerations were addressing the decisions made in the past, which did not reflect the functions and the values they believed the zoo to share.

“In one other zoo they decided to put gorilla and porcupine, african porcupine together. Without no previous interaction between the animals. They just put the porcupine inside the enclosure of gorilla. What do you think happened? Someone got injured. In different stages, but yeah. First, when the porcupine was introduced, gorilla saw them and touched them. And they understood why they are pine – porcupine. Gorilla were... porcupine was removed and for some time they were isolated, with no interactions. And after a bit, a month or two, they decided that gorilla had forgotten this, so they can try again. They tried again, they put the porcupine back inside. The big silver back, giant, strong gorilla male, saw the porcupine, took a giant rock and squeezed them. End of the coexistence. I would say that it is something predictable, yes, you don't need to have a porcupine pancake to predict that something bad will happen to the porcupine. But yes, accidents can happen.” (interview, Juris, pos. 66-68)

Another contradiction revealed when there were discussions about the species characteristic to local habitats, it was often noted that the visitors do not come here to see what they could by going into the forest. And, at the same time, the same people expressed concern

that the city-dwelling children visiting the zoo are so detached from knowledges about nature that they do not recognize the song of the rooster, they do not connect the egg to the chicken and lunch meat to the animal it comes from. Yet the ambassador and key character presented by the zoo is the tiger, August, which children recognize as tiger, similar to what they have seen in cartoons. (fieldnotes)

Summarizing, the ties between the multispecies persons involved are reciprocal and interdependent, yet the relative balance is conditional. The factors that impact the amount and extent of the control, care and futures are connected to the categories in which the animal is included (the demand or popularity, the rarity and nativity, the similarity or the unfamiliarity with other species, the usefulness for its species conservation, the level of danger when in physical contact). In retrospect, I see that in the design of the research I focused on the giving and the receiving, yet what remains unanswered is what was needed and desired and with these patterns of giving and receiving, if those expectations and needs are met.

4.4. Naming (animal who) matters

Another observation was that it is important what words are used in naming. And it was important who does the naming and which animals are named, what language or which patterns are followed, and which animals are not worthy of naming. However, under this naming I want to differentiate 3 sorts of names. This subchapter gradually covers these 3 types of names and with ethnographic examples shows the multispecies ties they illustrate.

The first sort is the name used in a colleague-to-colleague discussion, a marker that is meant to communicate the identification of the species. When debating on best materials to cover the base on a new enclosure or when discussing a specific animal spotted across the zoo, or when indicating the shortest way on the map, the name of the species was important. Amongst colleagues who know or quickly learn the animal collection of the zoo, amongst other things it helps to navigate space, enclosure condition requirements. Sometimes these names of species were said in its Latvian version, sometimes English, sometimes with addition of Latin version or a specifying note, under which category or family the species is “located”. In some conversations one person would say the name of the species and the other would verify that they are thinking of the same one by responding with the name of the species in another language.

“Tina brings in a paper and says that she found this, does anyone need this? Juris takes the paper, Tina tries to warn, but something very small and dark falls to the floor. Tina – that’s the bug, *blakts*. Everyone bends down to see it. Tina tries to lure the bug back on the piece of paper. Juris says – I did not see the beetle there, aaah, it’s the stinky one. The ... (ed. – Latin name, which I did not catch). Mētra

says – yes, the shieldbug. I found 2 more like them by my window, when I arrived this morning.” (fieldnotes)

However, I found it particular that the Latin name was never used in conversations about lions, tigers, giraffes – the popular animals. For them the scientific name was only pointed on the educational posters, by enclosures. And the neither were scientific species names used for animals which are not considered a part of exhibition or official collection, like local cats, visitor’s dogs, seagulls, rats and mice, free-roaming insects, and other fauna. They were referred to by their common species name (tiger, cat, bee, etc.). However, if the animal was given a proper name, that was prioritized over all other ways of identifying them (Bosītis, Bobs, Bronza, etc.). In example, if someone was retelling an event that took place by the tiger enclosure, but did not involve any tiger in particular, they described action happening “next to August”. But if the story entails more than one named animal, then use of species name was more common.



Figure 4.4.1. Picture with the informative and directive signs next to an enclosure. Author’s archive.

The second sort is the name of species that goes in registers and is printed out on the signs, maps, etc. It is meant to provide a reference to this species and maybe link to other species, but in concordance with global naming of the species, more or less.

Coincidentally, during my time in the field, the zoo announced that 30% of the animal species in zoo’s collection have been renamed (with various degrees of changes), based on changes and latest findings in taxonomy, inter-specie ties and genome research (Riga Zoo 2024). This caused a stir in the local media, resulting in a few internal debates over the following couple of days and resonated over my interviews with research participants. While some of the changes were relatively small, adding or removing geographical location or editing Latvian translation or interpretation of Latin name, indicating a signifying body feature, other name changes were more of a statement. I.e., in the case of *Nasua nasua* (also depicted in Figure

4.4.1.), previously named *Degunlācītis* in Latvian, they decided to swap the name with *Koati*, to align with the name given by the people of species origins and to steer away from the potential risk of familiarity, which could be caused by the use of diminutive grammatical form. When discussing the comments from social media, one of the research participants kept repeating that the renaming was “not that big of a deal, we just changed what will be written on the plaques”, while a colleague remarked “it matters what name you use, it affects how people look at this species” (fieldnotes).

Later on, in interviews this type of naming and renaming also came up as a theme alongside efforts of species conservation, with a highlight on what sort of portrait does the name paint for the species. Here I elaborate one of these cases, but it is worth to note that it is not a single instance. Multiple people talked about species which in Riga Zoo used to be called *Kalnu svilpējvarde*, but recently was renamed to *Karību milzu varde* (*Leptodactylus fallax*). As I was explained by a research participant, in other zoos and in the place of their origin they are known as mountain chicken frog, due to resemblance in taste, when the animal is cooked. As they were telling me this, they stressed the irony, how so many species conservation projects are doing research in their habitat, writing about them as mountain chicken frogs, yet doing it all in incognito, not to point out the remaining population spots to the local people, who have a long history of consuming them (initially just for their own nutrition, but later on also as a product of gastronomic tourism), which tipped the balance of their relationship of cohabitation and along with other factors drove them to endangerment. On renaming in Riga Zoo they said:

“we changed the name, cause they don’t whistle. Not sure why they were named as whistling. And people called them little chickens (ed. – cālīši), from the name of mountain chicken frog, but we want to rename them to stop the association with them being edible, they are *endangered*” (fieldnotes)

And the last sort is the naming is that of an individual, identifying the animals as a “persons” (Haraway, 2016, p. 103). However, the practices behind the naming, using the names, avoiding them and sharing them with the visitors is more complex than it seemed at first.

Firstly, about the name giving – names are usually given by the keepers who spend most time in contact with the animal, while attending to their needs as they settle in at the zoo. Then, if the animal is born in the zoo, they are introduced to the public only after a couple of months, so sometimes the name-giving is organized as a public event where people can submit their ideas or where the sponsors, who are marked as guardians (god-parents would be a more precise translation of the Latvian “krustvecāki”) can give the name. However, the guardian-ship is considered active only as long as you continue the financial sponsorship of the animal or species. When I asked, what would happen if a sponsor would drop out, a participant said that they are “not sure, but they definitely would not change the animal’s name. You can’t do that, take the name away. That would be cruel. That animal has grown used to that name.” (from

fieldnotes, pos. 261-263). I followed up on this thought with other research participants and I was told that often the name that is given out to the public does not match the name the keeper is using, the one the keeper gave before the animal was officially “introduced” to the public. Therefore, in these cases they thought that the change of the public name would not matter.

When I asked why the names are given, why do they matter, I received a myriad of responses, depending on the level of involvement the research participant had in zookeeping practices at the zoo or their personal experience with domesticated animals at home or family-owned farm. Most mentioned the factor of identification, which helps to navigate communication with other people who come in contact with the animal:

“So we can tell them apart. We use the name in our notes, so we can specifically note down that, let’s say, this one did not eat, right? That one likes pumpkins, the other one prefers carrots, and so on. This one has not eaten any hay today, this one has fallen ill and was visited by the vet. To make identification easier. And, of course, because it feels nice, it is like a small bonus to the job – that you can pick out the name” (interview, Marta pos. 54-55)

As well as in this example:

“If you are training birds of prey, to fly and things like that, each one of them will have a name. Because you need to manage them twice per day. You need to feed them, clean them, weight them and train them. And normally, to communicate with your colleagues, you need to communicate that... number one-one-zero... using a number would be a chaos, because you will not remember it. So, each one has a name.” (interview with Juris, pos. 157)

However, along with the convenience in identifying the individual animals, participants noted the other side of “making” the animal more distinct amongst the rest of them:

“Then the animal gets... becomes a person. Like in the case of August. I think the visitors really like it, that there are names. Well, because it seems similar as with pets, if you have a pet, they usually have a name. But that makes them too... well, less like wild animals, but more like, again, yes, like pets. And then that can reshape the understanding, which has its pluses and minuses. Especially, those minuses come out, when the animal dies. Then it becomes more tragic, because they had a name, their name was this and that... and you know them personally. That was the case with giraffes. It was horrible, when they died, with their names.” (interview, Rasa pos. 161-164)

If the name was public, the empathy of the public becomes a concern, as the animal has become a public figure, notably, not just with a name but with a personality:

“Animals used to be perceived differently. They were given a name and then people used to come specifically to visit... Zuze the elephant. It gave them a personality, And then they were spotlighted to advertise the zoo, so that they would come and get to know Zuze, who was one of the elephants.” (interview, Zane, pos. 198-201)

Although all animals are given a unique ID number for zoo collection management purposes, not all animals are named, not even by the humans they spend most of their time with. It depends on the type, size, number of animals, purpose of them being in the zoo and the time the animal spends in the zoo. If the animal is part of a large herd or a group (flamingoes, capibaras), very similar to the others, difficult to distinguish or if lifespan of the animal in the

zoo is short by nature (cockroaches) or by the zoo's management principles (zoe life or feed animals like bunnies, mice or crickets). As I noticed in the visit to the morgue and in discussion of animal parts used for educational purposes, when the names are given, they live on with the remains of the animal, retaining an embedded, embodied individual association and memory of the animal. Even if to an outsider it looks and during educational lessons is presented like a fluffy, black-and-white striped tail of a lemur, representative material of species and of long-tailed animals, to the keeper who was working-with the animal, it is the reminder of companion.

In these cases where the name is not given, the individuality is rendered invisible in direct animal-human interaction, yet that does not necessarily affect the attitudes on the species and the specific animal collective of this species, present in the zoo. Care and attention are still invested in their welfare. As a research participant handled insects grown for live feed, they commented that their life is still of value, they should feel as comfortable as possible. But the lack of a proper name, as noted in a couple of interviews, allows them to emotionally distance themselves, remain "professional" and lessen the emotional backlash if the animal undergoes practices of violent care (or "animal population management").

To summarize the findings, although the axis of names was not part of my initial research focus, it emerged from my ethnographic data so often and so vividly that I decided to include it as an inseparable factor. I support the perspective that names and naming matters and, in the examples, discussed above, the practices around names and naming show a lot about the inner workings of the human mind. It shows that names can render humans capable of establishing more notable, memorable ties with the animal and, by proxy, the species and environment that come in assemblage with the species or the individual animal. Names can be devices for activating empathy in humans not familiar with the animal, using anthropomorphism in the favour of the animal or the species. However, it can also be a tool for legitimizing misinterpretations, when the animal is perceived as a persona, as a character without getting to know the ways how the specific species would express their agency through the modes of communication available to them.

In conclusion of the chapter, I recognize that the volume of data collected remains impressive and the extent of the analysis has not been exhausted. With different combinations of the above-mentioned coded segments, the research could yield further insights into the topic. However, I also recognize the limitations of this research and a stop must be put somewhere.

CONCLUSIONS

Across the scholarships of anthropology, cultural geography, conservational biology, anthrozoology, heritage, animal, and environmental studies and others, researches agree on the premise that human (in)actions have made a significant and damaging impact on the Earth's systems that, accompanied with continuous anthropogenic processes, have resulted in the Earth's sixth mass extinction (Barnosky et al., 2011; Dirzo et al., 2014; Kolbert, 2014; Leakey and Lewin, 1995 cited in Fredriksen 2016). The current geological epoch Anthropocene has been named after the footprint of humans, which as some scholars argue is ironic in how much it highlights the human exceptionalism and assumptions on human species being a homogenous, yet the pressure of the footprint – the extinction – is simultaneously a global and a local event (Crutzen, 2002; Haraway 2016; Tsing 2017). Meanwhile, as zoos over the past 200 years have taken a turn from private animal collections to public institutions of environmental education and species conservation. I am curious about the changes this turn has brought to multispecies relations, as they are today.

Haraway (2016, p. 29) argues that all humans are responsible for how the future of Anthropocene will unfold, yet that not all humans are equally response-able. Therefore, to understand these response-abilities, the **aim of this research was to investigate how humans experience and perceive their relationships with companion species in these contact zones, at the zoo.** I set out to follow the threads on how the people working at Riga Zoo reflect on the role the zoo takes up in the modern society, as well as how do they situate human-animal relationships in this context of care in captivity.

The trouble with the species begins in how they are understood and referred to. Namely, “it matters what ideas we use to think other ideas” (Strathern 1992). There is a myriad of names used for the species we encounter, live and work-with in our daily lives – non-human, other-than-human, beyond-human, companion-species and multispecies, critters – which in this thesis I call companions. The term “species” in the western scientific context evokes the metaphors of trees and ladders, on which deep-rooted species organization principles are built on. These principles, although not directly compatible, both to some extent assume human exceptionalism, placing the human at the highest rank of evolution, assuming the evolution to be linked to development and progress with a singular trajectory – “forward” (Andreas Hejnl; cited in Tsing 2017, ch.5).

Multispecies ethnography is defined by “how a multitude of organisms' livelihoods shape and are shaped by political, economic, and cultural forces” (Kirksey and Helmreich, 2010, p. 545). It is a perspective which challenges the categories of nature and culture and asks to

reevaluate how species and their assemblages are seen, what it means to be part of species as an individual and what it means to be a human. Haraway calls this a becoming, which is “always becoming with—in a contact zone where the outcome, where who is in the world, is at stake” (Haraway 2008, p. 244). It focuses on these connections, because it is not as simple as to say that everything is connected to everything. On the contrary, at least to some extent, “everything is connected to something, which is connected to something else. While we may all ultimately be connected to one another, the specificity and proximity of connections matters - who we are bound up with and in what ways (Van Dooren 2014, p. 60, cited in Haraway, 2016, p. 173).

To investigate the multispecies relations and connections, as they are in the present day, I set out to follow the threads on how the people working at Riga Zoo reflect on the role the zoo takes up in the modern society, as well as how do they situate their human-animal relationships in this context. After spending some time in the field, actively engaging in participant observation and vivid informal discussions, I conducted 11 semi-structured interviews, testing and contextualizing my preliminary findings with the help of my research participants. For gathering, understanding and organising the data, I used Haraway’s (2016) string-figures as a theoretical device. The sample of fieldnotes and interview transcripts was coded with MAXQDA and the coded segments analysed considering how the multispecies relations mapped the contact zone of the zoo.

The key insights that emerged from the research are listed as follows:

- People working at the zoo do recognize companion species as interconnected and themselves as multispecies persons, entangled in these the assemblages, but these perspectives are not always active and on the forefront, and they do not always apply to all species. There is a lot of dense history for how humans position themselves and other species in the time and space, trying to make sense or establish some order of living beings, Riga Zoo is not an exception to it.
- The human-animal relations at the zoo are reciprocal, but the balance depends on the situatedness of the animal and the human (who lives there, who works there and who visits), as well as the individuality and purpose of the animal. Some animals at the zoo are more visible than others, even to humans working at the zoo.
- At the level of zoo as an establishment, the individual characteristics as well as the empathies towards the animal seem to dissolve, when the animal becomes statistical number in categories of income and expense, marker for zoo’s status due to the rarity, nativity, complexity and popularity of animals in the zoo’s collection.

- By presenting the imaginaries of habitats and representations of the species living in the wild, the zoo attempts to render invisible the individual histories of the animals that are in the zoo, put on display, distancing the visitor from the animal, but nearing it to the sanitized idea of the species.
- People at the zoo tend to struggle with ethical dilemmas when retelling the histories of the zoo and the animals which either used to inhabit it or are currently living in the zoo, under the care of themselves and their colleagues. There is a mixture of pride and shame as they contextualize most of the past and some of the present zookeeping practices, and the evolution of the zoo to what is commonly understood as modern zoo. Although, the differences in the level of sentiment correlates with the differences in the years spent working at the zoo, as well as with the differences in age, hence, potentially the volume of memories including the zoo, as well.
- People working at the zoo often come in conflict on the necessary or the required capacity of empathy for the animal, which enables them to better understand and care for the animal but also leaves them vulnerable and emotionally open to the animal and animals futures. Yet the same conflict does not appear as much when referring to species.
- Names given to the species affect the sentiments with which humans, both working in and visiting the zoos, perceive the animal at the zoo, taking an impact on how the human empathises with the individual animal, as well as the species and its habitat.
- Names given to individual animals resemble the name-giving to other humans, creating a sense of a character, a persona around the individual animal, often also ascribing personality that resonates with the anthropomorphised behaviours. While it can be useful for activating empathy in visitors who are more knowledgeable and skilled in recognizing human behavioural communication, it can also lead to misunderstandings due to differences in communication means for multispecies persons.
- From the zoo-keepers view, names given to individual animals are a device for establishing, training and enjoying the benefits of multispecies communication. They enable cooperative care and cultivate sense of more equally distributed agency in the multispecies relations.

To summarize, the multispecies ties in Riga Zoo are more complicated than I initially had anticipated. The contact zone of Riga Zoo consists of multiple groups of humans, as well as animals. Even though more groups mentioning other species could be identified, for the scope of this research I mainly focused on the human-animal relations. Within these contact zones, practices of various forms of care, thought, consideration and precaution took place, ensuring

the continued and sustained liveability of the entanglement. Furthermore, the research revealed the consideration of the humans working at the zoo that is dedicated to accommodating the interconnectivity of the multispecies persons living, working and dying in the entanglement. Therefore, with this thesis I argue that Riga Zoo and, potentially other similar multispecies contact zones, are a great mirror to our understanding of what is an individual, what is a species and what it means to be a human – multispecies being, entangled in assemblages with others.

On interpretation of this data on a larger scale, even as I would like to imagine, what these insights could mean in the context of Anthropocene, it seems counterintuitive with the concept of Anthropocene as I have used in this thesis. I share the concerns of scholars pointing out that the human exceptionalism, being by a large part at fault of having to define an Anthropocene as an epoch, is not what is going to solve the troubles it caused. The contact zone is situated, it is placed in the specific social, cultural, ecological, etc. conditions and while the method can be extrapolated to a larger scale, the sample for this thesis is limited. Furthermore, even though the insights gained do offer a possible explanation to the research question posed at the start, as mentioned in the respective chapters on methodology and analysis, I recognize that there are shortcomings of this research design and for further inquiries in this topic adjustments should be made, accommodating a more comprehensive approach to this.

Lastly, this thesis, as formulated and carried out, put the main focus on the processes and effects of the giving and the receiving in these human-animal relations. Yet what remains unanswered is what in these relations is needed and desired. A suggestion for further research in this field could be to change the focus to understanding, what are the expectations from the multispecies assemblages and if those needs and expectations are met. Another direction could be involving more diverse points of views, for example, using the network of zoos, carry out a multi-sited ethnography to compare the findings between different zoos. Or establishing a more direct rapport with the research participant, extending the field of research to their daily lives outside the territory of the zoo, as well. There are many possible opportunities to take up on, which cannot just illuminate our practices in multispecies relations, but, what to me seems arguably more important, tell us more about humans and how we see ourselves in nature, so that we can actively take informed decisions to creating sustainable futures for us and our companion species.

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APPENDICES

Appendix 1 – Interview guidelines

Ievads no manas puses ar to, kas es esmu, īsumā ko pētu un kādēļ aicināju uz interviju. Informācija par to, ka saruna tiks ierakstīta, lai atvieglotu transkripta izveidi, taču ieraksts ir konfidenciāls un tiks veikts tikai tad un tik ilgi, ciktāl intervijas dalībnieks tam piekrīt. Kā arī, ka gan sarunas laikā, gan pēc tam ir tiesības labot vai atsaukt intervijas laikā minēto. Īsi izklāstīt plānu intervijai, ka ir daži jautājumi, grupēti pa blokiem, taču šīs sarunas laikā mani interesē tas, kā viņi domā, redz un izjūt šīs tēmas, nav pareizo/nepareizo atbilžu, un neviens jautājums nav “obligāts”. Ja tiktāl jautājumu nav, tad sākam ar 1. bloku, bet ar iespēju pielāgot nākamo bloku/ sarunas plūsmu tam, kas intervijas dalībniekam sasaistās kopā.

#1 Par intervijas dalībnieku, viņu darbu zoodārzā

(pievēršot uzmanību terminiem, ko izmanto attiecībā uz dabu, apkārtējiem cilvēkiem un dzīvniekiem, lai turpmāk izmantotu viņu minētos un neuzspiestu savus terminus/konceptus)

- Kas ir tas, ko viņi dara zoodārzā?
- No kā sastāv viņu ikdiena, dienas gaita, cik tā ir mainīga? Kas to ietekmē?
- Kas ir viņu ikdienas patīkamākā daļa? / Ko viņi visvairāk novērtē savā ikdienā?
- Vai ir kaut kas, ar ko viņu pienākumi/ darāmais zoodārzā atšķiras no citu darbinieku veiktā?

#2 Par zoodārza apmeklētājiem

- Kāds ir biežāk tieši viņiem sastaptais zoodārza apmeklētājs? Ja grūti nedefinēt, varbūt var piedāvāt viņiem domāt caur 3 īpašību vai darbību vārdiem? Kādēļ viņi nāk uz zoo?
- Kas ir tas, ko apmeklētājs no zoodārza iegūst?
- Kas ir tas, ko apmeklētājs zoodārzam var sniegt?
- Vai paši arī nāk ar ģimeni/draugiem, vai sanāk pieredzēt zoo no apmeklētāja perspektīvas?

#3 Par dzīvniekiem zoodārzā

- Kā viņi raksturotu/ kādās grupās iedalītu dzīvniekus, kurus var sastapt Rīgas zoodārzā? Kā pamatotu šādu iedalījumu? *(pievērt uzmanību, kas nāk fokusā principa līmenī un pieminētajos – vai kaut kas īpašs tiek izcelts vai izlaists, kā viņi domā par šiem dzīvniekiem)*
- Kurš par šiem dzīvniekiem rūpējās? Kā tas notiek?
- Kas ir tas, ko dzīvnieks (no katras no iepriekš nosauktajām grupām) no zoodārza iegūst?
- Kas ir tas, ko šie dzīvnieki zoodārzam sniegt?

+ ja saskarās ar dzīvnieku kopšanu, kā jūtas par šo darba daļu? Kā to apguva? Vai to apgūstot bija kāds pārsteigums? Kam parasti ir jāpievērš uzmanība? Kādam būtu jābūt dzīvnieku kopējam?

+ ja piemin dzīvnieku vārdus, vaicāt, kā šie dzīvnieki tiek pie vārdiem, vai visiem dzīvniekiem dod vārdus, kā izlemj, ko darīt ar dzīvniekam iedoto vārdu (publicēt/ paturēt vai mainīt iepriekš iedoto/ izmantot treniņu procesā)?

#4 Par zoodārza konceptu un Rīgas zoodārzu, par zoodārza lomu cilvēka un dabas attiecībās

- Pirmā atmiņa par zoodārzu (jebkur)? Ar ko tas asociējās, ja bija iespēja viesoties, kāda bija šī pieredze?
- Zoodārzs toreiz un tagad, vai kas ir mainījies? Lūgt pastāstīt vairāk, kādu lomu šajās pārmaiņās ņem darbinieka pozīcija?
- Kādu viņi redz zoodārza lomu un funkcijas?
- Kā ir Rīgas Zoo kontekstā, kuras zoodārza šobrīd veiktās funkcijas šķiet vissvarīgākās?
- Kas, viņuprāt, zoodārzā ir vispopulārākais apmeklētāju apskates punkts?
- Kas, viņuprāt, zoodārzā ir visinteresantākais, kam būtu vērts pievērst cilvēku uzmanību?

+ ja piemin konceptu “daba”, “savvaļa”, “dabīgā/dabiskā vide”, lūgt pastāstīt vairāk, kā to saprot un kā to domā? Kur ir tās robeža, kur tā sākas/beidzas?

#5 Noslēgums

- Vai ir vēl kas, ar ko vēlas padalīties? Vai ir kaut kas, ko no jau runātā ir vēlme papildināt?
- Kādi jautājumi man?

Pateikšanās par sarunu un dalību, atgādinājums par to, kā mani sasniegt (gan tieši, gan caur viņu kontaktpersonu zoodārzā), ja ir nepieciešamība, un kas tālāk notiks ar datiem.

Appendix 2 – Participant observation tracking

In the table below I have compiled the data on how I carried out participant observation over the course of the fieldwork. It includes the research participant I spent all or most of the day with, while also marking the key person I was observing on the given day (and length of the particular fieldwork day). In total, it covers 155 contact-hours during 19 fieldwork days, carried out in the period between 01.03.2024 and 22.03.2024. The top row depicts abbreviation of 13 participant names (anonymized). Bolded names indicate the people I did not interview.

Table of fieldwork contact-time with research participants

Day / Person	Me	Ju	No	Ro	Za	Ti	Ra	An	Au	La	Vi	Pe	Ma	Hours	
1	Gray	Gray	Blue			Gray								9	
2								Gray		Blue				7	
3			Blue			Blue								9	
4	Gray	Gray	Gray	Blue		Gray	Gray							8	
5		Gray	Gray			Gray	Blue							8	
6	Blue	Gray	Blue	Gray				Gray	Blue	i				9	
7								Gray	Gray	Blue	i			7	
8								Blue		Gray	Blue			7	
9	Blue	Gray	Gray	Gray			Gray							8	
10	Gray	Blue	Gray	Gray										9	
11		Green	Green			Green								10	
12	Blue	Gray	Gray	Gray	i		Gray							8	
13													Blue	9	
14												Blue	i	8	
15	Blue		Gray										Gray	9	
16													Blue	i	8
17			Blue	i		Gray	Gray	i						6	
18	Gray	Blue	Gray		Gray	Gray								9	
19	Gray	Gray					Blue							7	

i	- interview with this person was held on this day
Gray	- partially observed or assisted this person during the day
Blue	- key person I was engaging with during that day (or part of the day)
Green	- following on a field trip day, out of the zoo

Appendix 3 – Figures A and B presenting the comparative frequency of all codes marked in corpus

	Frequency	Percentage
Ind > Ind-Behav/att	92	8,2
A > A-Species	91	8,1
A > A-Collect	84	7,5
Con > Con-Care	71	6,3
Con > Con-Control/safety	66	5,9
Ex > Ex-Visitor	60	5,3
Ex > Ex-A-exhibit	58	5,1
Ex > Ex-Colleag.	52	4,6
Ind > Ind-Placement	50	4,4
A > A-Individ	40	3,5
Situations > Zoo memory	36	3,2
Ind > Ind-Names	34	3,0
Situations > Conflict situations	29	2,6
Con > Con-wild	28	2,5
Ex > Ex-A-other	22	2,0
Ex > Ex-Human	22	2,0
B > B-Zoo-g-Visit	21	1,9
Con > Con-Nature	21	1,9
Con > Con-Modern	20	1,8
Ind > Ind-Think/judg	19	1,7
Ex > Ex-A-cont	19	1,7
ZP > ZP-Edu	18	1,6
B > B-Zoo-g-Anim	17	1,5
RZP > RZP-X (fun)	16	1,4
RZP > RZP-Edu	16	1,4
B > B-Anim-g-Zoo	16	1,4
ZP > ZP-Conserv.	16	1,4
B > B-Visit-g-Zoo	16	1,4
B > B-Anim-g-Visit	15	1,3
ZP > ZP-X (fun)	14	1,2
RZP > RZP-Other	13	1,2
RZP > RZP-Conserv	10	0,9
Ex > Ex-A-visit	8	0,7
Ex > Ex-A-feed	5	0,4
B > B-Visit-g-Anim	5	0,4
ZP > ZP-Other	3	0,3
RZP > RZP-Research	2	0,2
ZP > ZP-Research	1	0,1
RZP	1	0,1
ZP	0	0,0

Figure A. Screenshot of a table generated by MAXQDA presenting absolute frequencies of codes in the analyzed corpus. Author's archive.

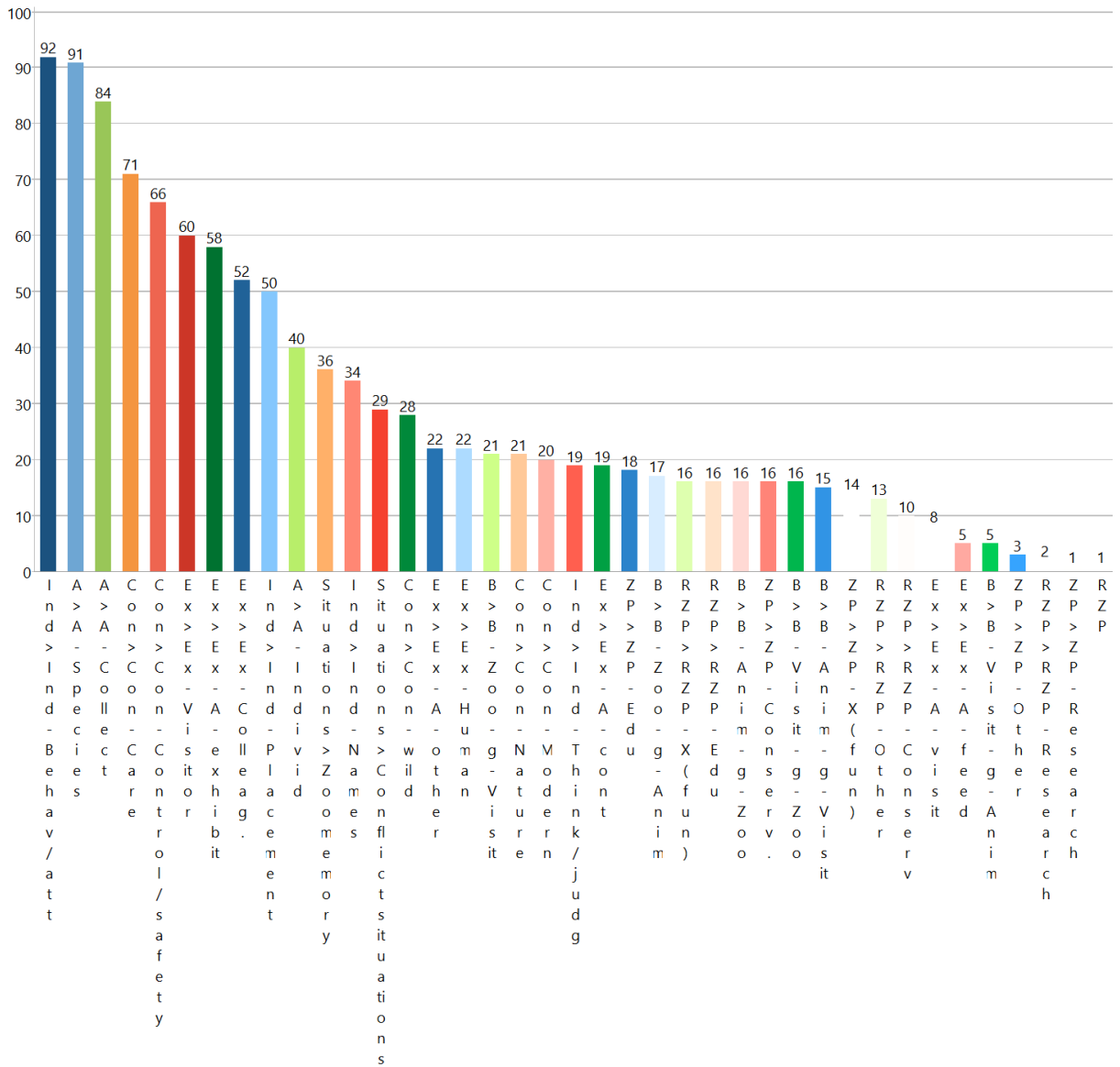


Figure B. Screenshot of bar chart generated by MAXQDA presenting absolute frequencies of codes in the analyzed corpus. Author's archive.

Maģistra darbs “Attiecību (pār)veidošana ar dabu: Rīgas Zoo viesi, iedzīvotāji un darbinieki*(Re)Creating Relationships with Nature: Riga Zoo Visitors, Inhabitants and Employees*” izstrādāts LU Sociālo zinātņu fakultātē.

Ar savu parakstu apliecinu, ka pētījums veikts patstāvīgi, izmantoti tikai tajā norādītie informācijas avoti un iesniegtā darba elektroniskā kopija atbilst izdrukai.

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