

QUEER(ING) NATURECULTURES: THE STUDY OF ZOO ANIMALS

by

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Abstract

My PhD project aims at exploring how the concept of “Nature” is constructed in relation to sexuality. More specifically, I analyze both popular and scientific discourses on gender variant nonhuman animals and same-sex sexual behavior amongst animals in zoological gardens. I am interested in the process by which the zoo becomes a site equipped with a set of “technologies” that, through discourses on nature and animals, shape identities and politics. I go as far back as the late eighteenth century when the zoo underwent transformation from a private menagerie to the modern enterprise of a public zoological garden, which involved scientific, economic and political goals. I look closely at evolutionary discourses emerging at that time. Following Foucault, I argue that sexuality plays a central role in scientific truth-making. With my research I also show that the category of the nonhuman animal is crucial in negotiating the boundaries of humanness and that this process necessarily happens through the mapping of sexual, gendered, racial, and classed subjectivities. I do this by focusing on contemporary cases of “queer zoo animals” that have become centers of public debates on naturalness of homosexuality and gender in the Euro-American context. Through my project I aim to reveal that we have always inhabited an interspecies world, where “nature” is never a politically innocent category and the specific implications for current thinking about sexuality and gender, and sexual politics of discourses about queer zoo animals.

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Marianna Szczygielska

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This dissertation was not a journey. My work on this project, which started almost six years ago in the Budapest Zoo, felt more like assembling a strange bestiary. At first glance, in its form and content the bestiary comes close to a taxonomic classification: it strives to be exhaustive and creates hierarchies to organize the world. However, in bestiaries we find imaginary and fantastic creatures; they group animals according to bizarre categories and impart moral lessons. In result, the strangeness of this compendium of “beasts” mocks the classificatory order. Acknowledging those whose generous support and companionship made this project possible, is probably the most difficult task. It seems like creating a classification: grouping people, deciding on the order, and chronology. That is why consider the following assemblage of wonderful human and nonhuman companions to this project a bestiary set against classifications: it is neither exhaustive nor complete. It is full of overlaps, loops, and discontinuous collaborations. It is neither linear, nor really chronological.

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Introduction

A recent visit to the San Diego Zoo confirmed my conviction that people reaffirm many of their beliefs about each other and about what kind of planet earth can be by telling each other what they think they are seeing as they watch the animals.

—Donna Haraway, “Otherworldly Conversations; Terran Topics; Local Terms”

Sex Discourse in the Zoo

On Valentine’s Day adult visitors of the Los Angeles Zoo are invited to a special event, playfully called “Sex and the City Zoo.” This R-rated zoo tour focuses on courtship rituals and other sexual behaviors of wild animals, and culminates with a candlelight dinner to the sounds of a live music performance for human lovers.¹ Many other zoos across the U.S. offer similar adult-only sex tours: the New York City’s Central Park Zoo calls it “Jungle Love,” the Boise Zoo in Idaho invites visitors to “Wild Love at the Zoo,” the Michigan Zoo brands the tour “Wild at Heart,” and the Binder Park Zoo offers a peek to its “Zoorotica.” This animal-themed Valentine’s Day tradition started in 1988 by the penguin pond at the San Francisco Zoo, and is credited to one of the zookeepers, Jane Tollini.² During their mating season penguins build rock nests for their mates. One February day Tollini placed red paper hearts in the penguin enclosure for the animals to use as a building material, and played mood music to this human-induced romantic scene. This is how the idea for a sex-themed zoo tour was born, and soon the San Francisco Zoo started their “Woo at the Zoo” tour to attract mature visitors hungry for curious facts about animal sex lives. “Animals practice the same sexual rituals we do, but with a twist,” Tollini says, “we even have homosexual wallabies and lesbian penguins.”³

With major transformations in sexual politics in the last three decades the phenomenon of homosexuality in the animal kingdom gained traction within widely recognized biological research.⁴ This prompted many zoos and animal parks to offer sex tours focusing specifically on sexually non-normative animal behavior. These

¹ Brenda Gazzar, “Sex and the City Zoo to Reveal Wild Courtship Rituals.”

² “Sex Tour At Zoo Thrills Voyeurs.”

³ Ibid.

⁴ Bagemihl, *Biological Exuberance*; Waal and Lanting, *Bonobo*; Roughgarden, *Evolution’s Rainbow*; Poiani, *Animal Homosexuality*.

“gay zoo tours” usually accompany other large-scale LGBT-themed events. The ARTIS-Amsterdam Royal Zoo started their “Homosexuality in the animal kingdom” tour in 1998 during the fifth international Gay Games, the largest sporting event for the LGBT community. Hosted by the oldest zoo in the Netherlands this special tour was initiated by its director, Maarten Frankenhuis – a veterinary surgeon with an interest in animal sexuality.⁵ Since then, ARTIS offers the tour annually during Amsterdam’s Gay Pride.⁶ Similar tours have been held during Gay Games in other European cities.

Since 2006, in collaboration with Gay Pride Berlin, the Berlin Zoo hosts “Gay Night at the Zoo” – an open-air swing party for more than one thousand guests organized to celebrate “diversity” (Fig. 1). This charity event funds school tours to the zoo. In the spirit of the zoo’s educational mission, the organizers highlight that “it is important to make life a real experience,” and recommend that pupils visit the penguin house in particular, because same-sex pairing is common in that species.⁷ Representations of tuxedo-wearing penguins are ever-present in the event’s promotional materials, casting this species as especially significant for the construction of the “queer zoo animals” phenomenon that is the main object of my research. Gay zoo tours and night parties seem to offer much more than just a fun, pastime activity. Local authorities are eager to build their cities’ reputations as open, liberal and tolerant places. Officially, welcoming these events underscores their corporate social responsibility. Since its birth in the nineteenth century, the public zoo helped showcase development, openness, and innovation and thus, allowed for performing certain types of modern subjectivities: in particular middle-class, national, urban ones.

Given the history of the zoo as intimately inscribed into a modern citizenship project, both gay zoo tours and parties, offer insight into an important modification of sexual citizenship and modern subjectivities, as cases of institutional harnessing of popular interest in animal sex. For example, a reporter of *Financial Times* comments on the Amsterdam gay zoo tours: “It seems such a tour would be a perfect outing for a gay stag or hen weekend for same-sex couples committing to civil partnerships. After

⁵ Miles, “All The Rage in Amsterdam.”

⁶ “Visitors Information.”

⁷ Wiegand, “10. »Gay Night at the Zoo«.”

all, it's only natural.”⁸ The direct link between the zoo tour and the institution of same-sex civil partnership with its rituals (stag or hen parties) implies high political stakes in performing sexual subjectivities in the zoo. Within the global context, with mainstream LGBT movements in many Western countries focusing on marriage equality as the normalizing identity politics feature, this setting is not coincidental. However, it also raises some questions: wouldn't the zoological context run the risk of animalizing homosexuals? Who can afford seeking affinity with nonhumans in shaping their sexual subjectivity? What is the gain for the LGBT community in proving same-sex pairing in nonhuman animals? The key answer lies in the ambiguous but powerful category of *naturalness* that serves as a double-edged argument against queers. On the one hand, non-heteronormative behaviors are often labeled “unnatural”, “aberrant”, or simply called “crimes against nature”; while on the other, nature tends to be opposed to culture as brute and uncivilized. Reclaiming nature for queer politics is a powerful move, but never an innocent one.

Queer(ing) Naturecultures is a research project designed to trace exactly those moments when sex discourse surfaces in the zoo, and attend to the implications it entails for the formation of sexual natures. These moments often couple sexuality with other markers of power, like race, gender, or class, in guarding the “Great Divide” separating the “natural” from the “unnatural.” In wondering how sex discourse manifests itself in the zoo, I look both at the reproduction of species as well as the reproduction of social orders through biological narratives, space design, and species classifications. This move allows me to trace a genealogy of power relations that explicitly involves nonhuman animals in the larger constructions of sexuality, gender, and race. In looking for those exact points of overlap between sexual and zoological taxonomies, I intend to sketch out the genealogy of sexuality anew. I am looking for a genealogy that would uncover the complex web of interconnections between the categories of humanness, animality, sexuality, and race, and further complicate the understanding of the nineteenth-century “invention” of sexuality.

In this sense, my work builds not only on the Foucauldian critique of the “Repressive Hypothesis,” but also on postcolonial studies of sexuality demonstrating that the turn-of-the-century scientific racism and early studies of sexual deviations,

⁸ Miles, “All The Rage in Amsterdam.”

along with the ensuing racial segregation and classifications of perverts, were deeply intertwined, and as such, cannot be analyzed separately.⁹ Siobhan B. Somerville suggests that “the structures and methodologies that drove dominant ideologies of race also fueled the pursuit of knowledge about the homosexual body: both sympathetic and hostile accounts of homosexuality were steeped in assumptions that had driven previous scientific studies of race.”¹⁰ I believe that this updated genealogy will reveal why it is that by the twenty-first-century one can imagine “queer zoo animals” out of the zoological closet. It also accounts for the material conundrum that underwrites the poststructuralist take on how power is exercised on the body – human and nonhuman, – and what political consequences this entails.

Even though I am writing about “sex discourse” entering the realms of the zoo, I frame my project beyond the discursive level of analysis, and towards a feminist new materialist understanding of the “material-semiotic” conjuncture beyond the “linguistic turn.”¹¹ With this “material turn” in feminist theory the discursive aspect of corporeal realities is not to be fully abandoned, but rather enriched by the investigation of physical materialities as active, self-differing components of cultural/natural processes that flesh out and politicize the often-abstract questions and problems of social sciences. In activating “naturecultures” as a conceptual tool for re-telling stories of zoo animals, this project aims to provoke new ways of thinking about the biological aspects of sexuality, gender, class and race. Donna Haraway introduces the term “naturecultures” in order to encompass modernist dualisms and the categorization of “nature” and “culture” as opposites. This allows her to narrate the cross-species stories of co-emergence. For her, “flesh and signifier, bodies and words, stories and worlds: these are joined in naturecultures.”¹² My analysis, focused on the humanity-animality spectrum negotiated at the sites of public exhibition venues via scientific discourses and colonial trade, is also tuned towards earlier conceptualizations of the discursive-fleshy aspects of sexuality, gender, and race,

⁹ McClintock, *Imperial Leather*; Stoler, *Race and the Education of Desire*.

¹⁰ Somerville, *Queering the Color Line*, 17.

¹¹ I pluralize new materialisms, because of the variety of positions on the “visceral” aspects of reality in feminist epistemologies, which theorize about embodiment, material environments and biology. See: Hird, “Feminist Matters New Materialist Considerations of Sexual Difference”; Grosz, *The Nick of Time*; Barad, *Meeting the Universe Halfway*; Bennett, *Vibrant Matter*; Coole and Frost, *New Materialisms*; Dolphijn and Tuin, *New Materialism*.

¹² Haraway, *The Companion Species Manifesto*, 20.

especially those articulated in black feminist thought.¹³ In concert with posthumanist and feminist new materialist scholarship, I use the work of Hortense Spillers in activating a decolonial approach to the study of sexual natures at the zoo.

In *Queer(ing) Naturecultures* I insist on narrating human and nonhuman animal sexualities together, as intimately entangled, even though the relationship between them is dramatically uneven. In fact, I do so precisely because of the huge imbalance between the categories of human and nonhuman that cascades into asymmetrical accounts of race, gender, and class at work in the zoo and beyond it. My point of departure is various cases of “queer zoo animals,” which flesh out the tissue of political discourses on sex and species. What or who are these creatures that stir debates on naturalness of sexuality and gender? With my approach I suggest to analyze the phenomenon of queer zoo animals in close relationship with historical changes that made it possible to openly discuss animal queerness, which itself is usually presented in relation to human sexuality. It is not a coincidence that penguin “homosexual romance” is flourishing when human gays fight for marriage equality and adoption rights, that gender-bending hyenas come in handy as models for medical explanations of human inter- or trans-sexuality through hormones, and that zoos are working with the latest reproductive technologies to stimulate giant pandas to breed against their own extinction. In attending to the importance of the zoo as a nursery-garden for scientific cultures and paradigms, I follow the thesis posed by Lynn Nyhart that from the late nineteenth century “the primary locus where the biological perspective developed was not the elite realm of university science but the civic realm of museums, schools, zoos, and other public enterprises.”¹⁴ Since then, the biological perspective represented in the zoo shifted towards pressing ecological issues of species extinction and climate change. In the epoch of the Anthropocene biodiversity is crucially linked with sexual diversity.

¹³ See, Spillers, “Mama’s Baby, Papa’s Maybe”; Wynter, “Unsettling the Coloniality of Being/Power/Truth/Freedom”; Weheliye, *Habeas Viscus*.

¹⁴ Nyhart, *Modern Nature*, 4–5.

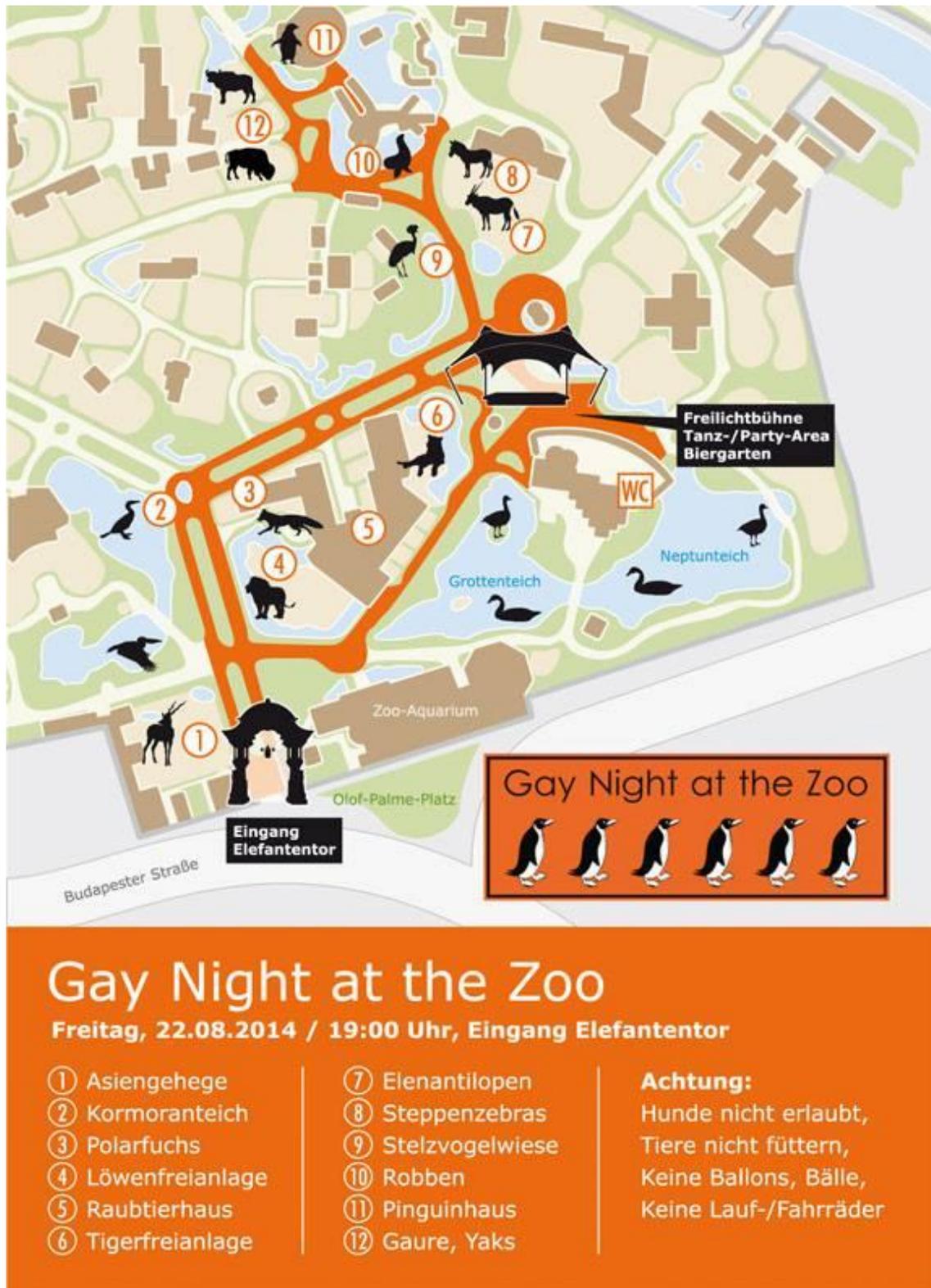


Figure 1. “Gay Night at the Zoo 2014” location and site map, Berlin Zoo.

Research questions

My main argument is that nonhuman animals play a crucial role in defining boundaries of human understandings of sexuality and gender, and therefore allow for broadening queerness as an analytical perspective. I investigate negotiations between biological and cultural aspects of these categories at the site of the zoo, because its rich history of exhibiting natural phenomena, establishing species classifications, and accommodating colonial trade inscribes this institution into the modern biopolitical machinery. Key features of developing subjectivities come to view at this peculiar venue with a three-century-long tradition of combining science with entertainment and public education. Therefore, my main research questions are: What is the relationship between notions of sexuality, gender, race, class and animality? How does the zoo mediate nonhuman queerness? Stemming from that general inquiry, I wonder how the representations of queer animals are produced, and in what ways they either challenge the heteronormative narrative in the zoo, or further reproduce certain forms of power relations, i.e. a homonormative approach.

Within the framework I propose, I problematize how “nature” is often used as a transcendental principle with serious consequences for human politics and social life – especially in queer politics. Most importantly, I ask: What is the role of the zoo in producing “sexual natures”? How are wider sexual politics impacted by the naturalization of subjectivities accommodated by the zoo? With these questions I explore the historical processes that lie behind more current takes on sexuality discourses in the zoo (e.g. in nature conservation and anti-extinction debates), as well as their specific political stakes. What is the relationship between the early modern field of sexology – with its insistence on taxonomizing – and the evolutionary principle with its redefinition of human-animal relations? How do more contemporary scientific practices like genetics and bioengineering influence the production of sexual ecologies in the zoo, and the sexual politics outside of it? With these questions I map out a set of intersecting historical processes occurring at the zoo in order to show how sexuality, along with its connections to the notions of gender, race, class and humanness, has been crucial for establishing the meanings of concepts like “species,” “extinction,” “heredity,” and “evolution.”

My specific focus on cases of queer zoo animals prompts questions on how representations and discourses about them function at the political level: are queer zoo

animals simply tokens for human politics inscribed into the normative function of the zoo, or are they important actors that interrupt the heteronormative evolutionary template? I put special emphasis on exploring how discourses on queer animals are gendered and racialized—an inevitable consequence of the colonial legacy that places sexuality and the category of the nonhuman together in medical records and scientific discourses. Given that the zoo produces operational definitions of sexuality and reproduction, I wonder if zoo animals should be framed as “engineered,” rather than “domesticated” or “wild” creatures. The process of “engineering” zoo specimens as embodied types of wild species, bred in captivity for generations and exhibited in urban environments, facilitates domestication of wider understandings of sexuality and gender.

Method: On Visiting the Zoo

A number of scholars writing about zoos have developed specific attitudes towards the seemingly obvious act of visiting those institutions. After all, for many zoo critics, going to this place of captivity might raise conflicting feelings: on the one hand, studying power relations or histories of the zoo requires being present in that space, while on the other, it entails participating in the consumer spectacle of watching wild animals on display, even with the full realization of what stands behind it. While zoo historians might “get away” with researching the archives, ethnographers and sociologists are likely to routinely visit the zoo as part of their fieldwork. These research encounters are often less fun than most people may imagine.

Lisa Uddin starts her *Zoo Renewal* with a chapter on feeling bad in the zoo,¹⁵ drawing from John Berger’s famous essay on why modern zoos continue to disappoint.¹⁶ Zoos promise an authentic contact with wildlife, immersion into curious worlds of exotic species, and face-to-face experience with wild animals. In reality, animals on display often look bored, sad and trapped in all-too-small enclosures that reveal design flaws and emanate the artificiality of the captive environment. While this feeling of acute disappointment with institutions that are supposed to educate the public about the natural world is the starting point for Berger, it sparks Uddin’s

¹⁵ Uddin, *Zoo Renewal*.

¹⁶ The essay was first published in 1977 under the title “Why Zoos Disappoint.” Berger, “Why Look at Animals?”

discussion on the twentieth-century revitalization of public zoo exhibits partly fueled by critiques such as Berger's. Randy Malamud, a literary scholar, makes an even more explicit point of writing on zoos without ever visiting them.¹⁷ He accesses those spaces through cultural narratives about them. The literary zoo becomes an archive available to be read, and Malamud reads about zoos, through zoos, against zoos, beyond zoos, and reads zoos themselves as cultural products and producers.¹⁸ My own research combines these varied scholarly positions coming from social scientists researching an institution of nature. Visiting the zoo is part of my methodological toolbox, but I also draw a lot of data from discursive sources like media, scientific articles, and historical documents.

To be more precise, my project utilizes a mixture of theoretical methodology, discourse analysis, and multi-species and multi-sited ethnography. I employ what Jeffrey J. Cohen calls “a hybrid methodology”¹⁹ that combines different theoretical traditions and disciplinary fields in order to capture the subtle interplay between discourses, matter, images, and their historical, political, and cultural contexts. In navigating this multilayered analytical landscape, my work arrives at the intersection of queer theory and animal studies, and draws from the interdisciplinary methodologies offered by both of these fields. The timeframe of this research encompasses the past three centuries, while its geographical scope is mostly limited to Europe and North America. I say “mostly” because—within what I call *traffic in HumAnimals*—animals I focus on come from (or travel) outside those two continents.

In the first part of the project, I build up my theoretical apparatus against the historical background of how questions of sex and sexuality have been tackled in relation to nonhuman animals at the site of the zoo, and further how these understandings of sex and sexuality critically intermingled with power structures of gender, class, and race. This part is not only aimed at sketching the institutional and historical setting for scientific discussions on sexuality, but more importantly it collapses the well-settled genealogy of the zoo as a modernist institution. As the overall framework for this section, I needed a concept that would reflect the troubled history of zoological collections in relation to space, order, and temporality, which I identify as three concepts crucial for a better understanding of the biopolitical

¹⁷ Malamud, *Reading Zoos*.

¹⁸ *Ibid.*, 10.

¹⁹ Cohen, *Medieval Identity Machines*, xxiv.

underpinnings of the modern exhibition institutions. For that purpose I coined the term *taxidermic taxonomy*, which I explain later in this introduction.

In addition to an interdisciplinary theoretical background, my fieldwork includes ethnographic observation and discourse analysis. My materials are mostly texts, images, films, and places. To pursue this journey along different meanings ascribed to animal sex in the epistemological project of defining sexuality means building on the “partiality of knowledge” available through examining nonhuman animal behavior and bodies as the fleshy signifiers of the natural order. Drawing on the feminist “situated knowledges” perspective, I am wary of the danger of reducing my objects of study into merely discursive phenomena.²⁰ That is why in order to situate both my perspective as a researcher and my unruly study objects in their respective contexts, I visited most of the zoological parks to which my cases are related. Sometimes my study objects were not there anymore. Can an absent penguin or a vanished hyena still constitute a “proper” object of study? To be a visitor-researcher at the zoo means paying attention not only to nonhuman animal bodies on display, but also to everything that surrounds them: the artificially-made environment of captivity that is their life-world, the informational placards with scientific facts about a given species, the route visitors are advised to take, human artifacts (indigenous masks, jewelry, or pottery) placed next to animal enclosures to illustrate the geographical region they come from, warning signs, stuffed animal bodies, digital edutainment infrastructure, merchandise in the gift store, enclosures out of order and under construction, vending machines, cage bars, wire nets, transparent plexiglas, water moats, and most importantly, other human visitors for whom the zoological spectacle was created. In order to reconstruct my object of study anew as a fuzzy node of complex relationships, rather than a given single locale or a fully captured specimen, I trace the moments of ontological tension able to reveal racialized and gendered points of difference dwelling on the naturalcultural borderlands. The perspective that a zoological display offers for observation is always a partial one. At the same time it provides an epistemically privileged perspective to one species granted a relative freedom of movement in a space defined by the captivity of other species.

²⁰ Haraway, “Situated Knowledges,” 1991, 197.

My visits to zoos and natural history museums were guided by an ethnographical research methodology. With the main objects of my study being the nonhuman animals and their institutional setting, I see my methodological approach to these visits as coming at the intersection of multi-species and multi-sited ethnographies. Although at the theoretical level the animal turn in anthropology relates to such fields like object-oriented-ontology, actor-network theory, or political ecology, it also brings back more classical anthropological traditions that today might be framed as studies of biocapital.²¹ According to S. Eben Kirksey and Stefan Helmreich, “multispecies ethnography centers on how a multitude of organisms’ livelihoods shape and are shaped by political, economic, and cultural forces.”²² Throughout my studies there have been at least two species involved at any stage of the analysis, one of them always being *Homo sapiens*. Given that the program of multi-species ethnography involves destabilizing the anthropocentric paradigm, I believe that the looping effect that continuously brings me back to the human as the reference point does not necessarily equal reinstalling the human at the center of my analysis. At the same time, I do not claim to grant my objects of study with agency or voice, because it would run the risk of re-exoticizing them as some sort of “native informants” of the natural world. I rather study links, relationships, and interconnections that multispecies encounters in the site of the zoo produce, turning the category of species itself into another kind of site. This is also where the multi-sited ethnography enters my methodological toolbox.

As defined by its founder George Marcus, “multi-sited research is designed around chains, paths, threads, conjunctions, or juxtapositions of locations in which the ethnographer establishes some form of literal, physical presence, with an explicit, posited logic of association or connection among sites that in fact defines the argument of the ethnography.”²³ The zoo is the most obvious site for my research, but as such it is not a fixed location. That state of flux applies also to nonhuman animals it accommodates, and their human observers. Within the zoological system animal bodies, bodily parts, and data about them are in constant movement. The heterotopic character of that space, which aspires to provide a foray into the multiplicity of nonhuman worlds in a single location, paradoxically turns it into a multi-sited ecology

²¹ Smart, “Critical Perspectives on Multispecies Ethnography.”

²² Kirksey and Helmreich, “The Emergence of Multispecies Ethnography,” 545.

²³ Marcus, “Ethnography In/Of the World System,” 105.

bursting with global connections, local contradictions, and transformations of ontological entities like sexuality, gender, class, or race. I call this dynamic system the *traffic in HumAnimals* and explain it in the next part of this introduction.

Mark-Anthony Falzon contends that, “multi-sited ethnography involves a spatially dispersed field through which the ethnographer moves – actually, via sojourns in two or more places, or conceptually, by means of techniques of juxtaposition of data.”²⁴ Each of my empirical case studies is bound to several different localities beyond the particular zoo or research institution in which the nonhuman animal in question resides. When discussing the global phenomenon of “gay penguins,” I analyzed cases from zoological parks and aquariums in Germany, Canada, Japan, the U.S., China, the United Kingdom, and Israel; visited several natural history museums, investigated wildlife documentaries and animated films, delved into children’s literature, examined news stories from gay to environmental media outlets; dived into zoo protocols and Species Survival Plan guidelines on penguin reproduction and breeding; and scrutinized popular books on penguin behavior and early-twentieth-century polar expedition field notes. Through these diverse materials and sites I managed to generate a terrain for my study by following the “gay penguins” as an unruly object—one always in-the-making, and always ready to slip away.

In the textual layer, which constitutes a major part of my research material, I analyze media articles that join popular and scientific explanations of my case studies, as well as scientific publications on animal sexual behavior and physiology. I treat other forms of representation like films, images, art, or zines as texts available for discourse analysis. This method of travelling between professional and popular genres is inspired by the feminist approach to scientific literature that allows for treating it as a storytelling practice.²⁵ This approach to science studies is focused on following the processes of producing biological facts not as raw materials for identity-formation, but rather as a translation between various ontological states, and promises to account for the corpo-material aspect of the scientific endeavor. Moreover, such a model of interdisciplinary research allows me to take seriously the intimate intricacies of multispecies encounters, or as Anna Tsing notes:

²⁴ Falzon, *Multi-Sited Ethnography: Theory, Praxis and Locality in Contemporary Research*, 2.

²⁵ Haraway, *Primate Visions*; Martin, “The Egg and the Sperm”; Franklin, *Dolly Mixtures*.

At the intersection between the sciences of nature and the sciences of culture, a new model is afoot, the key characteristic of which is multi-species love. Unlike earlier cultural studies of science, its *raison d'être* is not, mainly, the critique of science, although it can be critical. Instead, it encourages a new, passionate immersion in the lives of the nonhuman subjects being studied. ... The critical intervention of this new form of science is that it encourages learnedness in natural science along with all the tools of the humanities and the arts.²⁶

In my research I often stumbled upon a concern over mixing up the speculative realities created by and within social and natural sciences. As a critical interdisciplinary researcher, can I trust the language of biological sciences, which is indebted to narratives of progress and a history of domination, in recreating my objects of study? How can I access information about how other creatures inhabit such categories as gender or sexuality? Can one innocently get immersed in the lives of nonhuman animals when researching an institution that already promises such immersion at the expense of captivity? Multi-species love as a new model for interdisciplinary science might be a starting point for deterritorializing desire, imagining new modes of being in the world, and forging affiliations and political alliances.

Coming back to the issue of bad feelings at the zoo, my method allows me to revise some of the arguments behind why zoos disappoint, as ones more entangled within the wider politics of representation. Does the zoo's failure to represent Nature mean that all behaviors observed there cannot be treated as natural? Is the undeniably artificial character of the zoo containment enough to dismiss any behavior that seems out of norm as a "deviation"? It is a slippery slope that quite easily relegates any queer behavior in the zoo as an "aberrant" result of captivity. This kind of tension propels my investigation into the sexed natures in the zoo, and outside of it.

Taxonomizing and Trafficking: Theoretical Concepts

There are two main theoretical concepts that structure my research. Each is developed in one of the two parts of this dissertation. In Part 1 I start with the notion of *taxidermic taxonomies* by which I understand a set of processes that through classificatory systems captivate nonhuman and human animals in the boundaries of species categorizations. These classificatory schemes are tied to a broad historical background of how the notions of race, sexuality, and humanness were, and continue to be, negotiated in the site of the zoo as spatial, (dis)ordered, and temporal

²⁶ Tsing, "Arts of Inclusion, or How to Love a Mushroom," 201.

phenomena. Taxidermy functions here not only as a metaphor for capturing natural phenomena in their permanence, but also as a material practice ubiquitous to any historical account of classifying human and nonhuman animals in exhibition spaces.

Taxidermy and taxonomy are intimately intertwined. According to Rachel Poliquin, taxidermy turns its objects into ambiguous animal-things balancing on the boundary between science and art, remembering and killing, fact and fiction, human desires and anxieties. She writes: “As such, taxidermy always tells us stories about particular cultural moments, about the spectacles of nature that we desire to see, about our assumptions of superiority, our yearning for hidden truths, and the loneliness and longing that haunt our strange existence of being both within and apart from the animal kingdom.”²⁷ At the gardens, colonial zoological taxonomies meet colonial cultural taxonomies. The ambiguity and polyvocality of stories intricately knitting together human and nonhuman lives into stories of science, conquest, spectacle, domestication, natural history, politics, domination, and identity formation are what interest me in the following chapters.

Through the notion of taxidermic taxonomies I hope to reveal the seams in the seemingly smooth stitching of science, entertainment, and social orders at work in the zoo. This method of carefully untangling the threads of modernist narratives on progress and power brings into the open the exclusions, more or less precise cuts, guts, inner structures, and sacrifices that had to be made in order to mount a lifelike, convincing, and manageable body politics. In the context of the zoo, tracing those operations uncovers the both morbid and manufactured character of the naturalistic utopias of kinship, family of man, and sexual and racial differences. Paying careful attention to both the historical contingency and the situated character of biological knowledge production requires a dynamic methodological apparatus attuned to tensions and transformation, resonances and resistances, iterations and intricacies within the field of these structuring differences. In other words, any epistemology of the natural world is always circumstantial and requires an embedded perspective.

Part 2 of this dissertation is structured around the concept of *traffic in HumAnimals*. As I have outlined earlier, I treat my empirical cases as multifaceted nodes of relations that come through various mediums: scientific articles, media

²⁷ Poliquin, *The Breathless Zoo*, 10.

reports, livestock management guidelines, zoological display, popular books, images, and film representations. Initially I imagined that each case would require a strict focus on the institution where the animal discussed is based, but I quickly realized that within the zoological system individual animals, as well as their bodily parts, are constantly being trafficked between various institutions. Throughout the history of exhibiting animals this traffic had different valences and drives, from curiosity, rareness, economic value, exotic factor, potential use in agriculture, to finally center on issues of reproduction with the exchange of breeding specimens and gametes as its main current. Historically, it has roots in the colonial trade, deeply inscribing the trajectories of these exchanges into the routes of colonial conquest and possession of land and natural resources.

This very material traffic of bodies and their parts extends into the discursive level, so that my method culminates in tracing the exact trajectories of discourses on animal sex, which transgress institutional, national, and cultural borders. I see it as a two-way traffic. Paraphrasing feminist anthropologist Gayle Rubin, I argue that thinking about the traffic in HumAnimals reveals new tropes, particularly useful for posthumanist and queer studies, in what she calls *the sex/gender system* – “the set of arrangements by which a society transfers biological sexuality into products of human activity, and in which these transformed sexual needs are satisfied.”²⁸ Her definition of this system from the 1975 essay “The Traffic in Women” comes close to a Foucauldian conceptualization of biopower as “... the set of mechanisms through which the basic biological features of the human species became the object of a political strategy, of a general strategy of power,”²⁹ urging to theorize the traffic in HumAnimals as a politically binding matter of control and power. Rubin’s anthropological take on “traffic in women” grows out of structuralist theorizations of “exchange”³⁰ and “gift”³¹ as basic modes of social organization, which come through in my research in the practices of exchanging specimens between zoos, or some species being used as diplomatic gifts (see, chapter 6). With my queerfeminist framework I also draw on even earlier conceptualizations of such traffic,³² prompting feminist interpretations of the sex/gender system as functioning within the spectrum

²⁸ Rubin, *The Traffic in Women*, 1975, 159.

²⁹ Foucault, *Security, Territory, Population*, 1.

³⁰ Lévi-Strauss, *The Elementary Structures of Kinship*.

³¹ Mauss, *The Gift*.

³² Goldman, “Traffic in Women.”

of patriarchal norms, which naturalize institutions such as marriage (see, chapter 4). For Rubin the traffic in women forms the fundamental aspect of the political economy of sex, and as such becomes the basic target of the joint feminist and gay liberation: “the sex/gender system must be reorganized through political action.”³³

Whereas Rubin critically analyzes gender as a product of an exchange of women within strictly human kinship structures (as empirical forms of sex/gender system³⁴), I am interested in the traffic that carries gendered, racialized, and classed meanings shaping conceptualizations of humanity and animality constellations, as well as subject positions. I use the neologism “HumAnimals” to invoke the inseparability of the categories “human” and “animal” in the ontologizing work they perform. In this sense, my definition of “traffic in HumAnimals” differs from Carol J. Adams’ concept of the “feminist traffic in animals,” which is rather aimed at redefining feminist ethics and morals regarding consuming animal bodies and using them as commodities.³⁵ On the one hand, traffic in HumAnimals grows out of very specific zoo practices of exchanging specimens and building taxonomies, while on the other, it extends into the realm of larger cultural and political praxes of ontologizing differences and translating biological sexuality into the social tissue.

Chapter Summaries

Queer(ing) Naturecultures is organized into two sections. Each develops a specific theoretical concept that guides my analysis. With the notion of *taxidermic taxonomies* I narrate chapters, which provide historical background and a new genealogy to sex discourse surfacing in the zoo, while the *traffic in HumAnimals* serves as the framework to analyze dynamic systems of representations and material exchange that produce subjectivities out of a seemingly raw material of “nature.”

In the first part, I identify spatiality, temporality, and (dis)order as analytical lenses through which I diverge from a typical periodization of European and North American zoos that employs an all-too-common progress narrative in describing their institutional development.³⁶ Official zoo historiographies follow the evolutionary model of change, to build up a story of the modern zoo from early ill-arranged, messy

³³ Rubin, *The Traffic in Women*, 1975, 204.

³⁴ *Ibid.*, 169.

³⁵ Adams, “The Feminist Traffic in Animals.”

³⁶ Kisling, *Zoo and Aquarium History*; Hanson, *Animal Attractions*; Braverman, *Zooland*.

menageries to reformed, well-managed conservation parks. Nigel Rothfels pays attention to the “unnatural histories” of animals as evidencing an overlap, rather than a clean break, between private menageries and public zoos as substantially different forms of animal treatment.³⁷ Similarly, Uddin notes that by highlighting those moments in zoo history which tend to be considered beneficial for both zoo animals (by improving their living conditions) and human audiences (by upgrading the quality of zoological spectacle), these official zoo stories miss the meaningful ties between broadly defined “turning moments” in the affluent history of these institutions, and thus overstate the transformative character of changes in the zoo.³⁸ Exposing these overlaps helps in sketching out the intricacies of zoological collections as political projects belonging to modernity. The progressive narrative chain loses focus of the ways in which interspecies encounters and tensions in the zoo are not only indicative of broader social transformations, but are also formative for subjectivities that might be not immediately traced to this space. To disrupt this linear genealogy of the zoo, I trace topologies of power implicated in changes in zoo design, narratives, and practices as entangled with scientific discourses and popular imaginations of sexual identities emergent at the time. The three chapters in this section are organized in a chronological manner, each with a different transformation in focus, but still closely connected.

Chapter 1 introduces the guiding principles of spatial arrangement in early zoological collections and leads the readers through changing aesthetics of curiosity cabinets and menageries in creating a microcosm of the natural world. Through analyzing the spatial and visual aspects of the zoo exhibit I explore the ways in which it orients human desires and structures normative notions of sexuality and gender. The chapter reflects how the spatial constraints impacted classificatory schemes. It later inscribes early zoos into the tissue of the modernizing city with specifically gendered ideas about wilderness, modesty and morality in urban nature spaces designed to regulate not only animal behavior, but also human conduct. These ideas were also reflected in the transforming zoo display and architecture, clearly revealing the colonial roots of these exhibitionary institutions, and culminating in the spectacle of the human zoo. I show how the human zoo buttressed scientific ideas about racial and sexual difference, and through Hortense Spillers’ notion of “pornotroping” how black

³⁷ Rothfels, *Savages and Beasts*, 21.

³⁸ Uddin, *Zoo Renewal*, 6.

bodies on display were specifically sexualized.³⁹

In chapter 2 I complement this argument by attending to various forms in which the category of the nonhuman animal – disguised as the “savage,” “primitive,” or “degenerate” – weaves through the same methodologies and classificatory schemes that originate from the strictly naturalist taxonomies of species.⁴⁰ The zoo is not only a product of the sophisticated machinery that scientifically classifies animals into species, but it actually helped develop this system. The emergence of the category of “the homosexual” coincides with the transformation of the zoo into a public institution, and points to important overlaps between sexual and zoological taxonomies.⁴¹ I argue that the close relationship between nineteenth-century theories of evolution and psychiatric taxonomies, like Krafft-Ebing’s *Psychopathia sexualis* (1886) or Ellis’ *Sexual Inversion* (1897), in terms of a classificatory approach point to the zoo as an important part of the modernist discourse on the origins of sexuality. I trace the tensions between order and disorder by engaging with the Darwinian evolutionary narrative, which impacts the zoological classification system and basic definitions of “species,” “heredity,” and “type.” Through the idea of (dis)order I argue that as a spatial and visual installment of this taxonomic order, the zoos was an important scientific model both for working out basic understandings of biology and nature (like evolutionary theory) and for developing medical and psychiatric classifications of “sexual disorders.”

Lastly in this section, I look at the temporal dimensions of sexuality and the chronopolitics of the zoo. Chapter 3 is designed to give an account of how zoos can be viewed in relation to time and temporality, especially introducing the idea of extinction as the major drive for contemporary zoos, relying on species conservation as their *modus operandi*. This chapter focuses on the most recent developments in the zoo and the ways modern biotechnologies mediate species loss through conservation. The zoo is bounded to specific temporalities: on the one hand, it is submerged in the *longue durée* of evolutionary time, while on the other hand, as an entertainment and educational venue, it allows for “family” time that is a necessary part of the capitalist

³⁹ Spillers, “Mama’s Baby, Papa’s Maybe.”

⁴⁰ For an account how the categories of the “savage” or “primitive” have been used in the nineteenth- and twentieth-century sexology and how it emerged alongside anthropology see: Funke, “Navigating the Past.”

⁴¹ Foucault, *The History of Sexuality*.

notion of “industrial” time. In this way, the zoo is an exhibition of a formalized and organized “repro-heterosexual”⁴² temporality seemingly interrupted by queer animal same-sex acts. Instead, these “unnatural acts” get folded into general identity politics as long as they neatly inscribe into specific storylines of romantic love, marriage, and rainbow families. I refer here to the cooptation of queer animal sex into the naturalizing story of human sexual identity, but also into the zoo story translating biodiversity into sexual diversity as means for institutional survival. For this reason I employ theories of queer temporalities to better attend to this phenomenon and its political consequences.⁴³

The second part of my research is an analysis of three case studies of nonhuman zoo animals that have become centers of public debates on naturalness of homosexuality and gender variance in the Euro-American context. In this section each chapter is designed to focus on a particular species and its relations to human knowledge-building systems and politics. Also, each ends with a counter-cultural representation of that species (in the form of zine, film, political art, election poster), with which I hope to further complicate the underlying discourses I am reconstructing when describing each species along with its far-reaching political entanglements.

According to Thomas Laqueur, “... as soon as animals enter some discourse outside breeding, zoo keeping, or similarly circumscribed contexts, the same sort of ambiguities arise as when we speak about humans. ... When animals enter into the orbit of culture; their sexual transparency disappears.”⁴⁴ However, I propose an optic in which these discourses are never separate, and which therefore allows to see how nonhuman animals (both as signifiers and in their material presence) travel between different contexts with a heavy baggage of cultural meanings, and also shape those meanings and contexts. When one investigates very closely multiplicity of actors and hidden meanings standing behind the story of a particular species, these contexts often overlap creating a fascinating mosaic of interconnected spaces, institutions, and personal stories.

I start with the global phenomenon of “homosexual penguins.” Chapter 4 focuses on the busy traffic in animal bodies and meanings attached to them, observed at the event of the unprecedented attention given to the sexual habits of different

⁴² Halberstam, *In a Queer Time and Place*.

⁴³ Ibid.; Freccero, *Queer/Early/Modern*; Puar, *Terrorist Assemblages*; Freeman, *Time Binds*.

⁴⁴ Laqueur, *Making Sex*, 18.

species of penguins in zoos across Europe, North America, Asia, and the Middle East. I show how this prototypical “queer zoo animal” channels often-contradictory meanings and political agendas related to sexual identity to argue that it becomes a powerful site for naturalizing and normalizing certain sexual identities. Following the traffic in HumAnimals helps in unearthing specific patterns in animal representations that gain high symbolic value within a given political landscape. In the case of penguins, I argue that the issue of normative familial structures, fully synchronized with human neoliberal identity formations, becomes a political platform for various nationally specific struggles activated around sexuality. The politics of the zoo also overlaps with these political formations, as debates about reproduction and species survival structure breeding decisions in species conservation.

By analyzing the spotted hyenas captive colony at University of California, Berkeley in chapter 5, I consider how narratives on sexualized nonhuman animals employ hegemonic economies of sexual difference to build stories of naturalized sexuality and embodied gender difference wherein some chemical substances like sex hormones, and some body parts like genitals serve as primary actors in this semiotic-material system. I explore the “intimate links” between human trans and intersex experiences, nonhuman animal embodiment, and the somatechnics of animal representations in the endocrinological studies on the spotted hyenas. Through the notion of “transpecies intimacies,” I argue that the human-animal shared records in the medical classification system make the hyena an important part of the history of gender difference production, but also a possible ally in exposing the pitfalls of ontologizing those differences.

In chapter 6 I look at the giant panda exhibition at the Toronto Zoo, where I analyze the way in which this animal display evokes reproductive hopes and naturalizes heterosexuality as national, public, and precarious, as well as how it relates to the anthropomorphization and racialization of nonhuman animals in the context of human migration from China to Canada. With a species that is on the brink of extinction, is extremely difficult to breed in captivity, and at the same time is being fetishized as a symbol of wildlife protection, the exhibition of heterosexual desire as part of the zoo’s pronatalist efforts realized through the strong focus on the animals’ successful reproduction face many difficulties, paradoxically resulting in a parodied representation of normative sexuality. I argue that the giant pandas in the Toronto Zoo

form an important figuration of Asian and American-Asian identity in the context of Canadian employment of multiculturalism as a policy regulating and managing diversity. This “humanistic” multiculturalism is designed to sustain national unity by taming differences, and neatly classifying it in an archive, a museum, or a zoo.

I have carefully selected these cases because they have become *foci* of wider debates about nature, sexuality, gender identity, national belonging, and public health. I see these debates as a continuation of scientific and popular representations of animals as rich semiotic-material referents to human sexuality and gender expression. Therefore, I treat them as indicators of broader meanings produced at the intersection of sexuality and naturalness. Against a rich historical background sketched in the first section, and with detailed case studies of queer zoo animals, I argue that the zoo is, and has always been, a site for performing and naturalizing subjectivities with intense and complex political entanglements spilling over the confines of its walls. Although sex or gay zoo tours might seem like a marginal activity offered by an institution primarily devoted to environmental issues and not directly implicated in sexual politics, in my analysis the zoo becomes part of the biopolitical machinery that specifically binds gender, sexuality, race and class in scientifically manufactured facts about the natural world. These operations gain new meanings in the wake of the sixth mass extinction, the climate change and ensuing destruction of the natural environment.

Part 1. Taxidermic Taxonomies: A Genealogy of Queer Animality in the Zoo

More often than not, what we choose to say about nature reveals more about human beliefs, desires, and fears than it does about the natural world.

— Rachel Poliquin “*The Breathless Zoo*”

The Heterotopic Entanglements at the Zoo

At a first glance, the zoo might seem like a utopian place. By cultivating an idea of pristine Nature, it forms an ideal of human stewardship over nonhuman animals. However, even if imagined as the biblical Garden of Eden or Noah’s Ark, it is rather a perfect example of what Michel Foucault calls a *heterotopia*. In his lecture “On Other Spaces,” delivered for architects in 1967, Foucault contrasts utopias, as “sites with no real place”⁴⁵ with heterotopias, counter-spaces that are “capable of juxtaposing in a single real place several sites that are themselves incompatible.”⁴⁶ With numerous examples ranging from objects and places, through social institutions, to small- and big-scale events, Foucault builds up a vivid heterotopic space-time constellation.

In this enumeration of diverse heterotopias, he also mentions the zoological garden as rooted in the more general and older idea of a garden. As “the smallest parcel of the world and ... the totality of the world,”⁴⁷ the garden is for Foucault at the same time a prototype of heterotopic contradiction and interruption of the everyday. Precisely because of this critical tension between “normal spaces” and heterotopic ones, between sacred and profane, internal and external, I find the notion of heterotopia especially useful as a framework for my discussion of the zoos’ institutional development in relation to three major topics that run through this section – namely, space, temporality, and (dis)order. What is most astonishing when looking at zoos through the lense(s) of heterotopia, is that it disrupts several classifications of

⁴⁵ Foucault, “Of Other Spaces,” 24.

⁴⁶ *Ibid.*, 25.

⁴⁷ *Ibid.*, 26.

the concept as delineated by Foucault himself.

Space

Foucault sets the stage for his lecture with a statement that “the present epoch will perhaps be above all the epoch of space.”⁴⁸ The notion of heterotopia has been influential for human geography, but it also is crucial for animal geography.⁴⁹ It provides an excellent description of the zoo’s troubled relation to space – it is a place where numerous animals from different geographical areas, some that would never meet in the wild, co-exist in an urban garden that mimics the entirety of the world in miniature. Depending on historical era, zoological design groups animals according to different taxonomies in ways that make already artificially constructed habitats even more impossible – for example, when in an elephant house an African bush elephant cohabits with an Asian elephant, or when Chinstrap penguins swim in a pool meters away from a group of African meerkats. Heterotopias retain a certain affinity towards utopian spaces as they hinge on impossible encounters. But more importantly, they make “normal” spaces possible as their exceptions.⁵⁰ Foucault describes heterotopias as places “that have a curious property of being in relation to all the other sites, but in a way as to suspect, neutralize, or invert the set of relations that they happen to designate, mirror, or reflect.”⁵¹ Every enclosure in the zoo retains a relation to the natural habitat it represents, but it also stages the human-animal relations as purified rites of exhibiting the Other, properly tailored for human eyes. Both the freak show, focusing on the unusual, and the zoo’s naturalistic design, replicating nature in its most representative form, create the “norm” either by inventing an ideal type, or by showing the exception. Nevertheless, this heterotopic spatiality allows for other transgressions between categories of the normal and the deviant, transgressions that are the focus of my analysis of queer nonhuman sex.

Temporality

In most discussions, heterotopias are considered as predominantly spatial arrangements. However, Foucault introduces the term *heterochronies* to point to the temporal specificity of certain heterotopias that can either “accumulate time” like

⁴⁸ Ibid., 22.

⁴⁹ Philo and Wilbert, *Animal Spaces, Beastly Places*.

⁵⁰ See, Agamben, *State of Exception*.

⁵¹ Foucault, “Of Other Spaces,” 24.

libraries and museums, or link to the fleeting time mode of the festival.⁵² *Heterochronies* of the zoo bridge these two modes: as a living natural history museum, the zoo engages in accumulating species in their permanence, while at the same time there is, I argue, no clear break between the scientific/educational role of the zoo and the festive mode of the spectacle, circus, or animal show. In chapter 3, I theorize the zoo not only as an Agambenesque “anthropological machine”⁵³ producing the category of the human, but also as what I call an “anti-extinction machinery” that with humans as self-proclaimed “Earth’s stewards,” seeks to conserve species, and with the use of modern technology, even attempts at reversing time. The most advanced scientific methods like cloning have been employed in the “de-extinction programs” aimed at “breeding back” already extinct species or preserving scarce populations of critically endangered ones.⁵⁴

(Dis)Order

Whereas space and temporality are quite clearly articulated in the essay “On Other Spaces,” to fully grasp the role of disorder in heterotopia, it is necessary to go back to Foucault’s first reference to this concept in the preface to *The Order of Things* from 1966. He credits the idea of devoting the book to classifications and taxonomies structuring the sixteenth- and seventeenth-century European science to a short passage from Jorge Luis Borges, quoting a “certain Chinese encyclopedia,” which divides animals into “(a) belonging to the Emperor, (b) embalmed, (c) tame, (d) sucking pigs, (e) sirens, (f) fabulous, (g) stray dogs, (h) included in the present classification, (i) frenzied, (j) innumerable, (k) drawn with a very fine camelhair brush, (l) et cetera, (m) having just broken the water pitcher, (n) that from a long way off look like flies.”⁵⁵ This peculiar taxonomy enumerating real animals along with fabulous beasts and monstrous creatures prompts questions about the strange categories themselves, the rules guiding different systems of thought, but also the limits of imagination. Foucault writes:

That passage from Borges kept me laughing a long time, though not without a certain uneasiness that I found hard to shake off. Perhaps because there arose in its wake the suspicion that there is a worse kind of **disorder** than that of the *incongruous*, the linking

⁵² Ibid., 26.

⁵³ Agamben, *The Open*.

⁵⁴ See, Friese, *Cloning Wild Life*.

⁵⁵ As cited in: Foucault, *The Order of Things*, xv.

together of things that are inappropriate; I mean the **disorder** in which fragments of a large number of possible orders glitter separately in the dimension, without law or geometry, of the *heteroclite*; and that word should be taken in its most literal, etymological sense: in such a state, things are ‘laid’, ‘placed’, ‘arranged’ in sites so very different from one another that it is impossible to find a place of residence for them, to define a *common locus* beneath them all (emphasis mine).⁵⁶

This state of uncanny disorder becomes the basis for Foucault’s differentiation between *utopias* as affording consolation in their fantastic offer of possibility of anything, and *heterotopias* as disturbing reminders of “the impossibility of thinking *that*.”⁵⁷ The very idea of order, arrangement, classification, or taxonomy is abundant in categories and hierarchies structuring the epistemological conditions of knowledge systems. (Dis)order is at the heart of the function of heterotopias.⁵⁸

Foucault classifies heterotopias according to their function into those of illusion and compensation, and differentiates between heterotopias of crisis and deviation, pointing to their inherent relation to all the space that remains outside of them.⁵⁹ The zoo crosscuts these classifications. By fabricating an illusion of idyllic harmony with Nature, zoos arrange fauna in an organized manner and thus provide a space of order through taxonomic systems. In this process the zoo strives to not only reflect the assumed order in nature, but also to compensate for the (dis)order of the social world. Whereas for Foucault with modernity crisis heterotopias give way to heterotopias of deviation, contemporary zoos are again set on the borderland between the two. For Foucault, crisis is understood as a temporary state, which sets the individual apart from the rest of society, or at least calls for a different space for them (he enumerates adolescents, pregnant women, menstruating women, the elderly), while deviation is more permanent, grouping the anomalous in places such as prisons, hospitals, asylums, and resting homes. The exceptional status of endangered species stemming from their crisis in survival suggests the zoo is a crisis heterotopia as a space “reserved for individuals who are, in relation to society and to the human environment in which they live, in a state of crisis.”⁶⁰ At the same time, this state of crisis is being sustained, turning the zoo into a modern heterotopia of deviation, which hosts species perpetually threatened with extinction, perceived anomalous because of their rarity.

⁵⁶ Ibid., xvii–xviii.

⁵⁷ Ibid., xv.

⁵⁸ Foucault, “Of Other Spaces,” 25.

⁵⁹ Ibid., 27.

⁶⁰ Ibid., 24.

The notion of heterotopia might seem like a marginal concept in Foucauldian philosophy. He mentions it sporadically and fully develops it in five-page-long lecture. Nevertheless, I see heterotopia as an important thread running through the entirety of Foucault's thought – from his work on asylums,⁶¹ hospitals,⁶² to prisons,⁶³ – all identified as key institutions in his extended heterotopic taxonomy. I chose to introduce the following chapters through this concept precisely because of its paradoxical nature and political function. Somewhere between utopia and dystopia lingers heterotopia – from Greek *hetero-* meaning “other, another, different.” It is neither an ideal “no-place” nor its opposite “bad-place.” This “other space” has the unique quality of differentiating. For my analysis of the utopian-dystopian space of the zoo guided by *taxidermic taxonomy* as a mode of capture in a space of captivity, such a trait that allows for the affirmation of difference is fundamental. Through this basic political function heterotopias create the norm and assemble its deviant opposite. Unlike utopias or dystopias, they possess a material reality. Foucault notes that heterotopias “desiccate speech, stop words in their tracks, contest the very possibility of grammar as its source; they dissolve our myths and they sterilize the lyricism of our sentences.”⁶⁴ Therefore, this tangible aspect of heterotopias, one erosive to a purely discursive approach and one coming at the intersection of materiality and semiotics, is the starting point for my analysis of space, temporality, and (dis)order at the zoo.

⁶¹ Foucault, *History of Madness*.

⁶² Foucault, *The Birth of the Clinic*.

⁶³ Foucault, *Discipline and Punish*.

⁶⁴ Foucault, *The Order of Things*, xxviii.

Chapter 1. Space

In 1903, an alarmed reader wrote to the editor of the *Saturday Review* to express his concerns over animal welfare in the face of the planned reorganization at the Zoological Gardens of London:

It is no exaggeration to assert that these unhappy life-long captives and victims of human curiosity have little more of space than enough to allow them to take a half dozen steps backwards and forwards. Nothing – for a humaner and more feeling spectator – is more melancholy than the spectacle of these unhappy animals whose fate is to be immured in these small prisons, and everlastingly to be moving on their monotonous tramps within the limits of some eight or ten feet.⁶⁵

This letter from Howard Williams, an English humanitarian and early propagator of vegetarianism, is just one of the many examples of how zoos have been criticized over the years for the limited space and impoverished living conditions they gave to their inhabitants. This kind of argumentation could be bracketed exclusively as a sign of the turn-of-the-century animal welfare movement's preoccupation with captive animals. However, I situate this humanist concern with zoo animals' well-being within broader debates around the issue of space in the zoo that continue to fuel an institutional narrative of progress, and therefore, is critically linked to the meandering line of reasoning on the purpose of collecting wild living animals. Consider, for example, the report on the Gardens from 1833 highlighting "a great improvement both as regards appearance and utility," and suggesting to follow the plans of Edward Cross, who turned his private menagerie into the Surrey Zoological Gardens in competition with the London Zoo:

His monkeys, for example, instead of being confined by twos and threes in close cages, are preserved in a large space, well ventilated and heated, and defended by a glass frame; and here they can disport and exercise themselves throughout the whole winter.⁶⁶

In this sense, the space of the zoo is always under construction. It is constantly being reformed and revitalized according to the shifting desires of its audiences, reflecting their imagined ideal of the mystical contact with nature: as a source of aesthetic pleasure, a place to conduct scientific observation, learn about nature, or exercise domination and care. However, craving for encounters with living animals is not an

⁶⁵ Williams, "The Zoological Gardens."

⁶⁶ Owen, *The Zoological Magazine*, 96.

innocent desire. I analyze the ways in which the zoo simultaneously manages sexual desire and gives space for moral regulation.

This chapter gives an overview of the ways space arrangement in animal collections changed over time, what influence it had on the zoo landscape design and architecture, and most importantly, how these processes wrote gendered and sexualized meanings into zoo space. These changes determine the types of relationships humans are able to forge with other animals in the zoo, which through the notions of proximity and distance, understood both in terms of geography and interspecies kinship, influence understandings of gender, sexuality, race, and class by inscribing them into the human-nonhuman spectrum. Noteworthy, these relations rely heavily on vision and gazing as the primary mode of human encounters with nonhuman animals, solidified as such by modern science. Consequently, developments in display design are usually linked to the visual aspect of the exhibition. By attending to the ways in which this technology of gazing is often subtly eroticized, I trace the sexual and gendered dimensions of the zoo space. I also consider touch and tactility as a contact form desired in the zoo, reaching beyond the visual and activating material aspects of the zoo encounter, deeply coded in the colonial contact zone.

As a ground on which different geographies meet, the modern zoo project rests on a colonial cartography of the world. The heterotopic character of the zoo is, to a large extent, resultant from the colonial traffic in animals. I use the word “animal” broadly here as colonial commerce, apart from the prominent trade in exotic nonhuman creatures, also involved the traffic in humans for slavery and display. The institution of the human zoo has been inscribed into zooscapes, becoming one of the key elements of the so-called Hagenbeck Revolution in zoo space arrangement. Its haunting presence persists in colonial aspects of zoo architecture, certain nature conservation narratives, and even the racialization of zoo animals. In this sense, the practice of exhibiting nature is always a representational exercise in delineating the boundaries of humanness and animality, and stemming from that, a practice of territorializing such categories as sexuality, gender, race, and class.⁶⁷

By collapsing the urban and the wilderness, as well as by recreating multiple

⁶⁷ Haraway, “Teddy Bear Patriarchy”.

environments in one place, the zoo plays off the script of heterotopic spatiality in a fundamental way. Moreover, it incorporates various aesthetic strategies in representing natural habitats of the specimens on display: from Orientalist motifs, through romantic, pastoral landscape design, to naturalistic and immersion exhibits. My key concern here is mapping out these design strategies, landscapes, and cartographies, and in so doing, to look for the ways in which the space of the zoo is arranged to orientate and channel human desires. More specifically, drawing from Sara Ahmed's queer phenomenological approach, I show how through the zoological narrative on species reproduction "heterosexuality functions as a background,"⁶⁸ remaining nearly invisible behind actions taking place in front of it. Following Husserl and Butler, Ahmed reflects on the spatial aspect of "compulsory heterosexuality" forming "a field, space that gives ground to, or even grounds, heterosexual action through the renunciation of what it is not, and also by the production of what 'it is.'"⁶⁹ Similarly, in the zoo, the arrangement of species on display and the insistence on reproduction as the key organizing feature of that space grounds reproductive heterosexuality as the most natural background, an unquestionable given of species survival. Taking this metaphor to a more tangible level, zoos typically strive to create an illusion of depth in a limited captive space by painting a two-dimensional landscape on the back wall of animal enclosures. This flat imitation of the jungle, savannah, or rainforest serves not as much as a credible background for animals inhabiting that space, but rather for human spectators to orient themselves in relation to fantasies of wilderness, purity, morality, invisibility, and reason, continuously reproduced in that space. In my analysis the idea of the background as an imitation serves as a method for denaturalizing heterosexuality. In fact, this chapter is designed to provide a background to queer moments of reorientation that occur when the zoological script deviates from the well-trodden path of species survival narratives. It theorizes the zoo as a space of intimate co-dwelling of human and nonhuman bodies, generative of ontological and epistemological tensions. Zoos are thus primary sites for translating biological truths into social organization through the biopolitical script of space arrangement.

⁶⁸ Ahmed, *Queer Phenomenology*, 87.

⁶⁹ Ibid.

The Aesthetics of the Collection

The driving force for creating the first animal collections seems to be attributed to the virtues of wonder and curiosity.⁷⁰ According to Mary Campbell, “the relation of wonder to knowledge is crucial but largely oppositional.”⁷¹ This very intersection is also where early menageries with live specimens meet the cabinets of curiosities filled with skins, bones, and mounted creatures. Both establishments share many similarities, not only when it comes to bearing the burden of being portrayed as eccentric predecessors of public institutions of the Enlightenment era, namely the zoo and the museum. The word *menagerie* usually refers to an animal collection in the Renaissance, but entered the European vocabulary only in 1712 in France, first to describe domestic livestock in agriculture, or game animals.⁷² In zoo history, this term is often used interchangeably with travelling animal shows. But the main line of differentiating zoos from menageries runs through the dichotomies of public/private, science/entertainment, and systematic/chaotic.

Live animals in menageries supplemented the cabinets of curiosities in the task of demonstrating the wealth and prestige of their owners. Similarly, the Renaissance menageries focused on collecting fabulous, marvelous, and rare specimens. Krzysztof Pomian in his extensive study of the history of collecting in Europe, argues that cabinets of curiosities constituted:

a universe peopled with strange beings and objects, where anything could happen, and where, consequently, every question could legitimately be posed. In other words, it was a universe to which corresponded a type of curiosity no longer controlled by theology and not yet controlled by science, both these domains tending to reject certain questions as either blasphemous or impertinent, thus subjecting curiosity to a discipline and imposing certain limits on it. Given free reign during its brief interregnum, curiosity spontaneously fixed on all that was most rare and most inaccessible, most astonishing and most enigmatic.⁷³

Known as *Kunstkammern* and *Wunderkammern*, cabinets of curiosities were usually located in a single room filled from floor to ceiling with the most unexpected objects: corals, shells, coins, stuffed animals, books, rocks, minerals, gems, impaled butterflies, fossils, skulls, eggs, paintings, horns, ancient relics, dried plants, skeletons, and other collectibles. At first glance, it might seem as a chaotic heap of random

⁷⁰ See, Daston and Park, *Wonders and the Order of Nature, 1150-1750*.

⁷¹ Campbell, *Wonder and Science*, 5.

⁷² Kisling, *Zoo and Aquarium History*, 39.

⁷³ Pomian, *Collectors and Curiosities: Paris and Venice 1500-1800*, 77–78.

objects. However, historians of collections argue that there is a method to this accumulation of marvelous things.⁷⁴ The key to each collection's system is rooted in a different idea for an all-encompassing order of things – whether the five elements of the Earth, the four seasons, or the twelve signs of the Zodiac. The main point was to contain and possibly exhaust nature's stock by choosing the most extraordinary examples of its exuberance. Nature had its place in this microcosm next to art as another creative force, rather than its main point of interest.

From German, *Kunst* denotes “art,” while *Wunder* means “wonder.” Thus, in the *Kunstkammern* and *Wunderkammern* art and nature often merged. As Lorraine Daston and Kathrine Park note, in the early modern period, blacksmiths, sculptors, and architects incorporated natural specimens into the cabinet itself: panels made out of oak and ebony, encrusted with lapis, agate, silver, and marble; inner walls adorned with paintings, drawers hiding shells transformed into pitchers, nuts turned into goblets. They write: “if the artificialia and naturalia of these collections were wondrous placed side by side in the studied miscellany of the typical cabinet, they were still more wondrous when fused with one another, obscuring the boundaries between the wonders of art and the wonders of nature.”⁷⁵ I argue that they also fused the exotic with the erotic codified in the discovery of the unknown. The structure of the cabinet allowed for peeking into the bizarre universe inside and activated a type of curiosity, which holds an affective charge of excitement. It marks this space as exhibitionary and the wonder itself as erotic. The feeling of astonishment provoked by an encounter with the wondrous can be erotically charged. Attraction, passion, and possession fuel the insatiable appetite for collecting.

One of the earliest illustrations of the layout of such collection can be found in *Dell'Historia Naturale*, published in 1599 by Ferrante Imperato, an Italian pharmacist who owned one of the finest European cabinets of curiosity. One of the engravings illustrating this catalogue of strange objects, believed to be the first representation of a natural history collection (Fig. 2), shows a man presenting the treasures amassed in a room to his noble guests. The pleasure of entering the cabinet was reserved for privileged few. Next to a library filled with books, there is a study desk suggesting

⁷⁴ Bennett, *The Birth of the Museum*; Pomian, *Collectors and Curiosities: Paris and Venice 1500-1800*; Hooper-Greenhill, *Museums and the Shaping of Knowledge*.

⁷⁵ Daston and Park, *Wonders and the Order of Nature, 1150-1750*, 260.

that the collector meticulously researched gathered natural wonders. On the opposite side, an in-built set of ornate cabinets holds jars and boxes with minerals and preserved specimens. Part of the extravagant décor of this archive of mirabilia is its abundance and exhaustive occupation of space: every surface of the walls and ceiling is covered with shells, starfish, preserved sea creatures, and dried leaves. Stuffed birds and mammals rest on top of bookcases. The most valuable specimen is in the center – a large crocodile suspended from the ceiling. This monstrous, exotic creature guards the chamber of natural treasures amassed with a visible encyclopedic ambition. The fabulous beast is not, however, the center of the microcosm of this collection. That place is reserved for the collector himself.



Figure 2. Engraving from Ferrante Imperato, *Dell'Historia Naturale* (Naples 1599)

According to Pomian, before the mid-eighteenth century, natural phenomena were rarely featured in private collections. The exceptions to this were those whose collectors dealt with natural phenomena professionally – in medicine or pharmacy (as is the case of Imperato) – and in the botanical gardens of the nobility.⁷⁶ Menageries are not listed here, because zoological collections were limited to royalty and prominent aristocracy, as keeping live exotic animals required substantial resources and wealth. The late-eighteenth century saw growing interest in natural history,

⁷⁶ Pomian, *Collectors and Curiosities: Paris and Venice 1500-1800*, 99.

followed by increased traffic in animal bodies for the purpose of exhibition. Pomian notes that since that time:

... a special place was now reserved for the natural sciences on the map of knowledge, which accounts for their gradual restructuring, where botany was forced to cede its dominant position to mineralogy, which itself was steadily changing into geology, while zoology, previously pursued by only a very few, aroused increased interest. Here were both new disciplines and new objects, including the cultivation of plants, the rearing of animals, peat bogs, thermal springs, the riches of the subsoil.⁷⁷

Whether amateur or professional, the career of the naturalist not only provided thriving topics for salon conversations, but also began to be associated with the didactic mission of science, thus, slowly opening private collections to a wider public. With the growing political and cultural influence of the bourgeoisie, the popularization of natural history brought collections into the public eye and built up its scientific ethos.

By the mid-nineteenth century the idea of progress in exhibiting animals was crystalized around popularizing natural history. In 1867, the Belgian writer Esquiros reported the following about European zoos:

Hardly half a century back the giraffe, kangaroo and ornithorynchus were to the multitude of animals as paradoxical as the unicorn and griffin of the ancients. Even if a few exotic animals were better known, they were only met with in our collections of natural history; those cold catacombs of sense, gloomy galleries in which nature was classified, ticketed, stuffed and covered with dust, were better suited to create weariness, than to attract people to the study of animals. At the present day, those animals live, walk about, crawl, or fly before our eyes, and *that is progress* (my italics).⁷⁸

The educational value of displaying living animals instead of their breathless mounted bodies is underlined here as a progressive shift illustrating a key biopolitical feature of modern collecting practices and a parallel shift from death towards life. Seemingly, the cold taxidermy of old collections is left behind when the vibrant display of living specimens enters the stage. However, a new regime of biopolitics focused on the control over life does not erase the politics of death from the repertoire of “technologies of power.” The latter still plays a crucial part in the management of the zoological collections. A news report from 1860 on the zoological gardens in Paris, London, and New York notes that “dead, rare specimens fall under the dissecting-knife of the comparative anatomist, and furbish a large portion of the materials, upon

⁷⁷ Ibid., 218–19.

⁷⁸ “Eleventh Annual Report of the Board of Commissioners of the Central Park for the Year Ending December 31, 1867,” 62.

which [scientists] have based some of their most brilliant researches in natural sciences.”

Foucault locates this paradox of biopower still reliant upon the mechanisms of killing, in the intervention of state racism.⁷⁹ In *Society Must Be Defended*, he writes: “What is in fact racism? It is primarily a way of introducing a break into the domain of life that is under power’s control: the break between what must live and what must die. ... It is, in short, a way of establishing a biological caesura within a population that appears to be a biological domain.”⁸⁰ To find a vocabulary appropriate to grasp the paradoxical complementarity of sovereign power and biopolitics, Foucault introduces the category of the species as central for both state and scientific racism. The tension between life and death is also fundamental for *taxidermic taxonomy* as a mode of classification that elides with “letting die” as a guarantee for life and a norm-making apparatus. I highlight the taxidermic-deadly part of taxonomies as the element of fixing, preserving, and making categories eternal, in order to center my analysis on the species/racial distinction haunting the celebration of life in zoological collections.

The mid-nineteenth century is also the time in which the Linnaean system of botanical classification became the yardstick for spatial arrangement of animal collections. The great chain of being, or *Scala Naturae*, became the dominant visual metaphor for this and other classificatory systems, rearranging the space of the collection according to taxa, classes, and species belonging.⁸¹ Natural curiosities, like two-headed sheep or albino ravens, were replaced by singular specimens typical for a given species or class. Most importantly, this reorganization of collections according to the Linnaean system entailed positioning sexual reproduction as the paradigm for natural creation, so that the aesthetics of the collection relied on sexuality in a material way.⁸²

From the late-eighteenth to early-nineteenth centuries, collectors, professional scientists, and amateur naturalists across the Western world organized Linnaean Societies for the study of taxonomy and natural history; such societies were founded in London, Paris, Lyon, New South Wales, and New York, among others. These

⁷⁹ Foucault, *Society Must Be Defended*, 254.

⁸⁰ *Ibid.*, 254–55.

⁸¹ I explore the Linnaean system of classification in more details in chapter 2 on (dis)order.

⁸² More on that in chapter 2.

establishments often branched out into other gentlemanly, elite clubs focused on specific disciplines, like geology, botany, or zoology, giving a firm scientific grounding and authority to the new civic project of the zoological park. In 1826, the Zoological Society of London was founded with a specific goal of creating a zoological collection for studies of living specimens rather than cadavers, skins, and skeletons of deceased exotic creatures.⁸³ By that time several royal menageries in Europe already opened their premises to the public. Since 1779, the imperial Schönbrunn Tiergarten near Vienna could be visited free of charge; soon after the French Revolution, animals from the Versailles menagerie were transferred to the Museum of Natural History at the Jardin des Plants in Paris.⁸⁴ Following this trend, in 1828, the Zoological Gardens of London opened its gates, but at first, its admission was restricted to the members of the Society and their guests.⁸⁵ The Gardens were located in the West End of Regent's Park, on a parcel of land donated by the Crown, and were later supplied with the Tower of London menagerie's livestock, providing material continuity between the new zoological enterprise and the its royal predecessor. The steady flow of specimens from the colonies assured that the collection grew. As reported in 1870, the Gardens accommodated more than two thousand specimens.⁸⁶ Their spatial distribution reflected deep institutional investment in the classificatory systems of organizing the natural world.

The Gardens' guidebook of that same year gives an overview of how these animals were grouped according to their classes and types.⁸⁷ Taking birds (Ave) as an example – the largest class of creatures gathered in Regent's Park – most of these animals could be found inside the two net-wired structures of the Western and Eastern Aviaries. Different genera of birds (crows, vultures, cranes and storks, pheasants, eagles and owls, pea-fowl, pelicans, kites, ostriches, vultures, and parrots) were housed in separate enclosures each, while waterfowl were accommodated around different ponds (the Ducks' Ponds, the Goose Ponds, and the Three-Islands Ponds).

⁸³ Ito, *London Zoo and the Victorians, 1828-1859*, 23.

⁸⁴ Åkerberg, *Knowledge and Pleasure at Regent's Park*, 22–23.

⁸⁵ Ito, *London Zoo and the Victorians, 1828-1859*, 97.

⁸⁶ “On the first of January last, it was 2,031, consisting of 598 mammals, 1245 birds, and 170 reptiles and batrachians, besides the fishes in the aquarium, which do not appear to be included in the annual census. Constant additions are made to the series, not only by purchase, but also by gifts of correspondents in every part of the world, and by exchange with the continental establishments.” “Zoology,” 559.

⁸⁷ Scalter Lutley, *Guide to the Gardens of the Zoological Society of London*.

The method of grouping species into genera and situating them within the taxonomic order was not followed dogmatically, but rather underwent adjustments according to strict rules of economy of space. Evolutionary visions took over the aesthetics of the collection. Historian Harriet Ritvo notes that “no matter what shape of the zoo they described, the nineteenth century guidebooks were inveterately linear, prescribing a single route through the exhibits, from the entrance to the refreshments stands.”⁸⁸ The 1870 edition of the guidebook to the Gardens reveals efforts to systematically represent each species and serves as one of the tools for popularizing natural history – simultaneously acting as a map visualizing the taxonomic order and as a dictionary of its scientific language, introducing Latin nomenclature. These tools not only standardized zoological vocabulary, but also were instrumental in guarding the borders of the zoo against unprofessional, popular knowledge and the “vulgar” tastes of the lower classes.⁸⁹ With the noble mission of public education on its agenda, the zoo became a site that not only cultivated wildlife and plants, but also bourgeois moral ideals amidst the turmoil brought by modernity. In this sense, the order believed to be found in nature was set to counterbalance the disorder of modern times. Relation between the changing urban landscape and the zoo as a recreational space shaped the ways in which this institution employed the category of nature for broader class, racial, gender and sexual politics.

Queer Urban Ecology

The first public zoos grew into the spatial and social tissue of the modernizing city. Whereas menageries were usually located in city outskirts amidst the vastness of the royal gardens, the modern zoo appeared in the nineteenth century as a strictly urban phenomenon. After the Industrial Revolution drastically transformed the city landscape, the solace of nature was sought for as a remedy to the degeneracy lurking behind every corner of the overcrowded metropolis. In that time, the chain of transformations in the spatial and social dimension of the city was unprecedented. Together with intensive urbanization and industrialization, population rates grew rapidly due to migration from rural areas to the cities. Intense intercontinental migration changed the ethnic and racial composition of the population in both Europe and North America. From the seventeenth century onward, London was the leading

⁸⁸ Ritvo, *The Animal Estate*, 218.

⁸⁹ Wirtz, “Zoo City,” 64.

industrial center of the British Empire, and with steady population growth, by the nineteenth century it became the largest city in the world. By 1860, its population tripled. In North America, this trend was similar with overall urban population growing from eight percent in 1840 to over sixteen percent only two decades later.⁹⁰ Cities expanded spatially, following clear patterns in urban development: centers bursting at their seams with the influx of the impoverished working class cropping areas of slums, while the bourgeoisie moved to new residential areas.

The rise of capitalist economy, the ensuing individualization of society, and the entrance of women into the workforce challenged traditional family structures. Catching up with these accumulated changes whilst conquering other parts of the world, the bourgeoisie invested in an even more romanticized idea of nature that provided a flawless sanctuary for their moral ideals. In his classic essay, William Cronon traces the radical transformation of the term wilderness in English occurring at the turn of the nineteenth century, breaking with its negative meaning as a descriptor of “waste,” or a “barren,” “savage” landscape, towards a more positive locus of pristine nature and higher moral values. He writes: “Wilderness hides its unnaturalness behind a mask that is all the more beguiling because it seems so natural. As we gaze into the mirror it holds up for us, we too easily imagine that what we behold is Nature when in fact we see the reflection of our own unexamined longings and desires.”⁹¹ This transformation of the idea of nature/wilderness from a threatening and uncontrollable force into a peaceful locus of higher moral value coincided with developments in technology, transportation, and territorial expansion of the West. According to Ritvo, “as nature began to seem a less overwhelming opponent, the valence of its traditional symbols began to change. ... The ferocity and danger associated with wolves and their figurative ilk became a source of glamour, evoking admiration and sympathy from a wide range of people who were unlikely ever to encounter them.”⁹² The modern zoo was a perfect space offering such encounter in a controlled environment, presenting the thrilling, but no longer threatening beasts to an audience already alienated enough from nature to deposit their moral ideals into this impeccable creation.

⁹⁰ Goheen, “Industrialization and the Growth of Cities in Nineteenth-Century America,” 50.

⁹¹ Cronon, “The Trouble with Wilderness,” 5.

⁹² Ritvo, “Beasts in the Jungle (Or Wherever),” 24.

Moreover, similar to the narrative genre of the colonial travel writing, the romanticization of wilderness is a gendered and libidinally eroticized enterprise transpiring through the language of discovery or reconstruction of the “virgin” jungle, or the myth of an unspoiled purity and availability of pristine nature. McClintock accurately terms these fantasies “porno-tropics,” a kin category to Hortense Spillers’ “pornotroping” that I utilize further in this chapter. However, as McClintock notes, “if, at first glance, the feminizing of the land appears to be no more than a familiar symptom of male megalomania, it also betrays acute paranoia and a profound, if not pathological, sense of male anxiety and boundary loss.”⁹³

In the heart of the empire, the sum of interlinked processes of modernization activated social anxieties around the seemingly degenerative and corruptive character of a newly transformed urban space. Environmental pollution of the industrial metropolis came to be quite literally attributed to the influx of immigrants, whereas their poor living conditions started to be seen as both source of diseases and of moral decline. The perceived proliferation of deviancy associated with the modern city can be pinned down to a number of social and environmental factors tied together as threatening to white heterosexual European masculinity. Strictly urban phenomena such as overpopulation, contact with “corruptive” migrants, different diet along with toxicity, pollution, and contamination were widely believed to constitute some causes of same-sex behavior, not yet defined as homosexuality by medicine and psychiatry. In any case, in the early-nineteenth century, nascent sexual degeneration theory located sexual inversion as an external rather than internal threat, in response to extreme demographic upheavals, as well as colonial expansion.⁹⁴ Port cities, as the entrance gates to Western empire, became the epitome of the modern phenomenon of the urban crowd, and saw the increased visibility of homosexual communities.⁹⁵ At the same time, due to intensive colonial commerce and traffic in exotic species, port cities across Europe and North America were also the first places to host zoos as prime symbols of civic pride, enhancing a cosmopolitan urban character with the therapeutic value of properly catered contact with nature.

In contrast to the emergent discourses of perversion, wilderness has been

⁹³ McClintock, *Imperial Leather*, 24.

⁹⁴ See, Mosse, *Nationalism and Sexuality*, 1985; Chamberlin, *Degeneration*; Pick, *Faces of Degeneration*.

⁹⁵ Chauncey, *Gay New York*, 137.

reinvented as a healthy alternative to the artificiality of the city and the vices it produced, or as Patrick H. Wirtz notes, “nature was brought into the city to tame the jungle the city had become.”⁹⁶ According to Elizabeth Blackmar and Roy Rosenzweig, restoring the arguments for a public green recreation area in New York City in the early 1850s, “middle-class reformers contended that a park would improve public health and morals by providing laboring families with fresh air exercise, and an alternative to the saloon.”⁹⁷ Similarly, zoos served as venues for moral uplift for the lower classes, specifically regulating matters of sexuality. For example, Ritvo writes in reference to the London Gardens: “A commentator in the *Quarterly Review* applauded the rise in working-class visitors to the zoo between 1848 and 1854 in more pragmatic terms; many of the 135,712 additional zoogoers ‘were, no doubt, rescued, on those days at least, from the fascination of the public house.’”⁹⁸

There is a close-knit relationship between the constructs of sexuality and wilderness, and it gains a spatial dimension in publically designated nature spaces. In *Gay New York*, George Chauncey notes that the anti-vice societies in the late-nineteenth and early-twentieth century “sought to reconstruct the urban landscape itself in ways that would minimize the dissipating effects of urban disorder” by “creating parks to reintroduce an element of rural simplicity and natural order to the city” among other efforts in urban moral reform.⁹⁹ Public parks, as well as botanical and zoological gardens, were designed to provide an honorable contact with nature, and as Wirtz argues, “zoological exhibitions conveniently instructed the growing urban populace about their place in the changing world.”¹⁰⁰ This kind of moral regulation is well inscribed in the landscape design of the zoo, denoting it as a highly heterosexualized space. As Catriona Mortimer-Sandilands and Bruce Erickson point out, “wilderness spaces such as parks came to be valued as sites to be preserved away from the corrupting influences of urban industrial modernity, and in particular, as places where new ideals of whiteness, masculinity, and virility could be explored away from the influence of emancipated women, immigrants, and degenerate

⁹⁶ Wirtz, “Zoo City,” 80.

⁹⁷ Blackmar and Rosenzweig, “The Park and the People: Central Park and Its Publics: 1850-1910,” 111.

⁹⁸ Ritvo, *The Animal Estate*, 215.

⁹⁹ Chauncey, *Gay New York*, 137–38.

¹⁰⁰ Wirtz, “Zoo City,” 61.

homosexuals.”¹⁰¹

Initially, the zoo was developed as an elitist space for strictly regulated contact with wild fauna, steered by scientific principles. Therefore, it marked the space with the authority and privilege of science. As public venues, these spaces of scientifically approved encounters with wilderness allowed for the fostering of specific kinds of relationships towards nonhuman nature, as well as for a public display of middle-class respectability. Even in larger urban contexts, for Wirtz, “the nineteenth-century European and American city evolved into a site of exhibition as individuals and social groups increasingly sought to present themselves to the public in both formal and informal manners.”¹⁰² The gardens, seen as the pinnacle of modern urban culture, became a fashionable place to observe exotic animals, and to be observed by other visitors. Thus, they cultivated particular kinds of desire. More specifically, the deployment of wilderness for a healthy and morally uplifting recreation resulted in adjusting public green areas to visible heterosexual courtship rituals. The exotic and slightly dangerous allure of the zoo made its premises suitable for human romance.

A reporter, who spent a night at the Washington Zoo in 1901, recalls the words of one employee: “‘There are usually people around the park until the gates are closed,’ remarked Night Watchman Payne, ‘mostly couples, and,’ he smiled, ‘they don’t seem to come to mind the animals.’”¹⁰³ Does this anecdote refer to heterosexual couples exclusively? Typically, urban nature areas create possibilities for any type of sexual encounter and often serve as the primary spaces for homosexual and queer cruising. In this sense, in the dual process of “weeding out” the contaminating bewilderment of queer sexualities and nurturing the idea of wilderness as a safe haven for heteronormativity, the space of the zoo disciplines and distributes human bodies in a manner that promotes certain forms of courtship. This is the mechanism of mounting heterosexuality as the background for everyday practices I described earlier. The camouflage of this operation makes heterosexuality not only nearly invisible, but also in case of the zoo it inscribes it into a larger framework of naturally everlasting phenomena.

¹⁰¹ Mortimer-Sandilands and Erickson, “A Genealogy of Queer Ecologies,” 14.

¹⁰² Wirtz, “Zoo City,” 66.

¹⁰³ “Midnight at the Zoo.”

Mortimer-Sandilands outlines those mechanisms in relation to the early parks movement in the U.S. She writes:

The design of urban parks, then, was explicitly organized around an agenda of discouraging expressions of sexuality other than those formally sanctioned in the public eye; morally and physically sanctioned heterosexual courtship was, in turn, built into the landscape with the strategic placement of such visibly pair-appropriate facilities as benches to punctuate the romantic stroll, and open-walled gazebos.¹⁰⁴

As places for the promotion of moral and physical fitness for the citizenry, European and American zoos were also properly equipped with venues for displaying middle-class respectability and wealth like restaurants, music pavilions, and picturesque paths. Consider this excerpt from an 1888 article reporting the failed attempt to establish a zoo in Washington D.C.: “The shady groves never materialized; the secluded grottoes failed to appear; no lovers had opportunity to saunter along the embowered walks and whisper sweet nothings to each other while the fountains dashed their cooling spray all around.”¹⁰⁵ The nostalgia for the unrealized ambitious zoo design is expressed via missed opportunities for romance, assumed to be coded within this promising space and revealing the normativity of its design. Casual strolling along wide-open promenades was a typical activity in the zoo. The space also allowed for getting lost in the myriad of romantic alleys with small bridges, perfect sites for stealing a kiss – all in the public eye, sanctioning any behavior considered inappropriate. Additionally, the exotic aura of the zoological exhibition, with its reminiscence of a jungle hunt or safari chase, stimulated heterosexual courtship rituals oftentimes imagined as another kind of conquest. This setting is especially visible in the ways architecture shapes the space of the zoo.

Architectural Associations

I hold my ticket to the Budapest Zoo. It was easy to find the main entrance: when walking down the street across from the city park, a large gate with animal ornaments arises, leaving no doubt that this where one needs to walk through to enter the land populated with exotic creatures from different parts of the globe. Approaching this impressive construction, I start noticing several details. The turquoise ceramic ornaments of the rooftop glisten in the sunshine. Below, a pack of polar bears leans against a circular roof, as if on a lookout to all sides of the world.

¹⁰⁴ Mortimer-Sandilands, “Unnatural Passions?,” 18.

¹⁰⁵ “Zoological Gardens: Previous Attempts to Add Them to the Attractions,” 6.

The slender arch of the gate hides a jungle fresco blending smoothly with the Hungarian landscape behind it. The scene is framed with eleven small feline heads. I think they might be panthers. I take a moment to locate the species in the taxonomic order, but these sculpted animals have no labels. The whole structure rests on the backs of four bulky elephants, reminiscent of flat world cosmology. The “turtles all the way down” are nowhere to be found. As the main entrance to a space accommodating fragments of the world embodied in captive wildlife, this strange Oriental crossbreed between a temple and a fortress is itself an amalgam of different imaginary geographies and cosmologies.

When discussing the spatial dimension of the zoo through architecture, it is crucial to attend to the globalizing ways in which it brings together different parcels of the world into the heart of modern metropolis, and thus, becomes the primary locus of colonial encounters for the urban public. In this sense, the zoo functions as an extremely dynamic space, pulsing with tensions arising from the universalizing aspiration of synthesizing the whole world in a small space.¹⁰⁶ As a heterotopic space, the zoo is “an extraordinary bundle of relations.”¹⁰⁷ In postcolonial literature this kind of ambiguous spatiality is often defined through the metaphors of touch, contact, and friction, which are crucial for my analysis to highlight the erotic aspect of zoological encounter.¹⁰⁸ The notion of *taxidermic taxonomy* in its material-metaphorical meaning also contains the idea of tactile contact in the way the term “taxidermy” is derived from Greek “skin arrangement,” and refers directly to technologies of preparing specimens. Through the display of living specimens, the zoo allows for a direct contact with nonhuman animals. While certainly not identical, the desire to encounter the exotic Other was also present in earlier curiosity cabinets and persists in Natural History Museums through the craving for material contact and authenticity it promises to convey. According to Poliquin:

Just as the worn surfaces of architectural ruins convey a tactile knowledge of their textured history, the torn skin on the gemsbok’s neck gaping straw and clay, a Tasmanian devil’s opaque black eyes set in his near-mummified face, the sun-bleached face and beak of a blue and yellow macaw, all on display at the Harvard Natural History Museum, likewise appeal to our sense of touch, but it is not a texture we need to handle in order to understand.¹⁰⁹

¹⁰⁶ Similar globalizing tendency, along with the colonial legacy, can be found in the World Fairs. See: Mitchell, “The World as Exhibition.”

¹⁰⁷ Foucault, “Of Other Spaces,” 23–24.

¹⁰⁸ Pratt, *Imperial Eyes*; Tsing, *Friction*.

¹⁰⁹ Poliquin, *The Breathless Zoo*, 219.

The derma of *taxidermy* becomes the surface of touch, contact, and friction. Even though people go to zoos predominantly to look at wild animals, as Berger shows, this space allows for a range of other interactions, including physical contact with nonhuman animals through feeding, touching, and rubbing against their backs during camel and elephant rides, leaving zoogoers with “the thrill of proximity to wild animals and the happy sense of secure superiority produced by their incarceration.”¹¹⁰

In this sense, the zoo, dependent on the colonial project, reflects broader geographies in a limited urban space and produces multi-layered representations and worldly connections critical for the construction of “the human.” It is also instrumental in shaping what Mary Louise Pratt calls the imperialist “planetary consciousness” of European elites. This planetary consciousness served as the lantern guiding colonial travels, but also as the paradigm for mass events like the Great Exhibitions or institutions like museums or zoos. Pratt uses the term “contact zone” to describe the very space where colonial encounters occur. She defines it as “an attempt to invoke spatial and temporal copresence of subjects previously separated by geographic and historical disjunctures, and whose trajectories now intersect.”¹¹¹

While James Clifford adopts “contact zones” in reference to the museum,¹¹² I apply this term to the zoo – especially relevant when one imagines wild animals being transported thousands of kilometers from one continent to the other to be exhibited as live specimens for human audiences. Zoological exhibition also involves careful processes of grafting the cultural tissue to these new spaces of exotic encounters along with the fauna and flora excerpted from their original locations. These “cultural grafts” oftentimes take a form of stylized architecture. In other words, zoos are not only intercultural contact zones, but also places where nature meets culture. For Haraway, “contact zones” form the essence of naturalcultural world-making. Untangling the multispecies knots of communication in dog training, she highlights the transformative character of these encounters: “contact zones change the subject – all the subjects – in surprising ways.”¹¹³ This openness for the unexpected within the contact zone, its ontological fecundity, are important tropes for my queer analysis of zoological exhibition along with the political and ecological consequences for identity

¹¹⁰ Ritvo, *The Animal Estate*, 219.

¹¹¹ Pratt, *Imperial Eyes*, 7.

¹¹² Clifford, “Museums as Contact Zones.”

¹¹³ Haraway, *When Species Meet*, 2008, 219.

formation practices taking place at the splice of the naturalcultural tissue. However, it is also crucial to remember Pratt’s argument that “contact zones” necessarily engage elements of conflict, inequality and colonial domination, even if realized through seemingly non-violent tools such as scientific expeditions and natural history writing. For Pratt “natural history extracted specimens not only from their organic or ecological relations with each other, but also from their places in other peoples’ economies, histories, social and symbolic systems.”¹¹⁴ Contact zones are the very spaces wherein cores and peripheries are produced and imperial and colonial rule is preserved through selective cultural exchange. The relation between the zoo as a physical place and the way it attempts to represent the world through species embodiment, proximity and tactile encounters, crucially links it to the history of colonial expansion, which becomes visible through geographic iconography, landscape layout, and architecture.

The main gate of the Budapest Zoo I mention earlier is an illustration of the ways in which imperial and colonial relations are represented in zoo architecture, augmenting the extra-territorial character of this space, even in states that were not directly involved in colonial conquest. In this sense, the employment of Orientalism in architecture in Central Eastern Europe in the early twentieth century needs contextualizing.¹¹⁵ In Hungary, turn-of-the-century eclecticism combined modernism, historicism, and avant-garde styles and was heavily influenced by reemerging ideas of nationalism, culminating in the so-called “national romanticism.”¹¹⁶ Ignác Alpár, the main architect of the Millennial Exhibition held in Budapest in 1896, incorporated Byzantine, Persian, and Indian motifs with Hungarian folk influences to demonstrate the Eastern influence in Hungary. According to János Gerle, other architects at the time developed a “national style that would rekindle the concept of ancient Eastern kinship,”¹¹⁷ based on anthropological research into the Eastern roots of the Hungarians. In this sense, the architecture of the Budapest Zoo was heavily influenced by these imperial developments in architecture and politics.

The main gate to the zoo was designed in 1910 by Kornél Neuschloss-Knüsli,

¹¹⁴ Pratt, *Imperial Eyes*, 31.

¹¹⁵ I would like to thank Zsuzsanna Varga for her insightful comments that helped developing this important contextualization.

¹¹⁶ Gerle, “Hungarian Architecture from 1900 to 1918,” 236.

¹¹⁷ *Ibid.*, 234.

the chief architect of the revitalization project, which merged with another important transformation of the zoo, from a private to public venue. The elaborately ornamented structure is a prime example of the Hungarian Art Nouveau style, heavily influenced by Indian and Syrian architecture, as well as inspired by organic forms. The gate quickly became the trademark of the modernized zoo. Moreover, its construction was financed by the income generated by a freak show performance¹¹⁸ – one advertised as “Miss Krao: The Missing Link,” featuring a brown girl from Indochina whose body was covered in hair.¹¹⁹ The financing of the gate that became the zoo’s emblem from a human zoo attraction sheds more light on the intricacies of the colonial and imperial architecture at the zoo.

Another zoo building designed by Neuschloss-Knüsli in a recognizable Oriental style also gained international fame for various reasons, including a diplomatic scandal. The elephant House takes after a mosque, complete with a minaret tower. “So faithful is the reproduction that upon its completion it nearly led to serious diplomatic complications between Turkey and Hungary,”¹²⁰ reported the delegate of the New York Zoological Society after his visit to the Budapest Zoo in 1915. We are reminded that the element of conflict is imbedded in the negotiations taking place in the contact zone. These architectonic motifs relating to Eastern material cultures have another political function, namely that they are part of the burgeoning nation-building processes within the Austro-Hungarian Empire.¹²¹ The nationalism embedded in the Oriental symbolism of this era’s architecture references the idea of the Hungarian nation as the noble descendant of eastern Ural mountains dwellers, separate from the rest of the Central-Eastern Europeans and is discernible in emblematic modernist urban developments such as the Budapest Zoo and its monumental architecture.

Styling zoological buildings after non-Western architecture, especially temples and other places of worship, has a longstanding tradition in Western European gardens. As is the case of the Elephant House at the Budapest Zoo, by blending neocolonial architecture with national influences, architects were not aiming to represent the actual geographical context of the nonhuman animals inhabiting this

¹¹⁸ Mirtse and Mirtse, *Ablak A Természetre. Évszázadok Állatkertje Budapesten*, 16.

¹¹⁹ Durbach, *Spectacle of Deformity*, 89–114.

¹²⁰ “Nineteenth Annual Report of the New York Zoological Society,” 113.

¹²¹ Bender and Schorske, “Budapest and New York Compared,” 24.

space with a high level of accuracy. Enclosures resembling Hindu temples oftentimes housed African elephants, while Egyptian temples were reserved for giraffes and zebras whose diverse habitats do not include deserts. This lack of geographical accuracy is typical for the notion of Orientalism developed by Edward Said. In his classic conceptualization of the term, the Orient holds a very material presence in the West “as a mode of discourse with supporting institutions, vocabulary, scholarship, imagery, doctrines, even colonial bureaucracies and colonial styles.”¹²² In this sense, the zoo provides a physical space in the heart of the empire where Orientalism can be exercised through so-called exotic zoo architecture that was extremely fashionable throughout the nineteenth and early twentieth centuries in Europe. With its inner tension between a claim to authenticity and staggeringly imitative character, it functions primarily as an evocation of colonial longings and fantasies, and may be successfully reproduced even in cultural contexts without any colonial history. More specifically, presenting animals in carefully crafted cultural settings simultaneously situates them within the romantic idea of nature and naturalizes the colonial conquest. Although animal bodies themselves serve as the locus of colonial imaginings, their displays, additionally equipped with ethnographic referents, enhance the affective power of the zoological spectacle and authenticate Western zoogoers’ experiences of a round-the-world voyage, without leaving their homeland.

Embracing the heterotopic spatiality of the zoo reveals colonial longings of zoo designers, architects, and their audiences. Composition of the collections reflects certain colonial trajectories, because the officials and agents of the empire eagerly stocked the zoo with live specimens representing dominated territories. Colonial conquest assured the flow of raw materials, natural resources, and livestock to the empire, turning them into the substrates for natural historical knowledge production. In this sense, nonhuman animals carry the burden of embodying exotic foreignness, and within the spatial context of zoological encounters this Oriental fantasy often becomes sexually charged, or, in Uddin’s words, it follows “a cultural script of white heterosexual men travelling to colonial peripheries for encounters with exotic otherness.”¹²³ Throughout his work, Said repeatedly underlines the association of the

¹²² Said, *Orientalism*, 2.

¹²³ Uddin, *Zoo Renewal*, 128.

Orient with sex, even defining Orientalism as “an exclusively male province.”¹²⁴ He writes: “Why the Orient seems still to suggest not only fecundity but sexual promise (and threat), untiring sensuality, unlimited desire, deep generative energies, is something on which one could speculate: it is not the province of my analysis here, alas, despite its frequently noted appearance.”¹²⁵ Postcolonial feminist scholars develop this aspect by further exploring the acute feminization and eroticization of the Orient.¹²⁶

How is Oriental eroticism coded in the spatial setting of the zoo? To enter an ancient maze, a Moorish temple, ruins of a “lost” civilization, or an intricately woven wire-net dome of the aviary draped with lush tropical flora during a casual stroll in the city zoo induces the sublime thrill of a wild adventure. The romantic character of the scenery mimics Oriental sensuality. By creating and channeling the unlimited desire for inhuman beauty, dangerous animality, and the mystical unknown, the zoo materially becomes one of the crucial mediums of Orientalism, transforming foreign, yet domesticated zooscapes into primordial sites of eroticism. Said attends to “the commonly held view of the Orient as a geographical space to be cultivated, harvested, and guarded,” by tracing the proliferation of “images of agricultural care for and those of frank sexual attention to the Orient.”¹²⁷ The powerful metaphor of the garden as a space of civilizing, taming, trimming, and shaping the landscape, but also of extracting resources and cultivating certain ideas of Nature, can be also found in the rationale for keeping wild animals in zoological gardens. According to Sarah Besky, who analyzes tea plantations in India, “gardens are ways of disciplining bodies and environments through methodical manual labor and careful taxonomies, both of plants and of people.”¹²⁸ By extension, the care for the exotic fauna in the zoological garden is another iteration of colonial power.

Immersed in Nature

The imitative character of colonial style zoo architecture was not perceived uncritically. In fact, this issue became one of the crucial points of differentiation

¹²⁴ Said, *Orientalism*, 207.

¹²⁵ *Ibid.*, 188.

¹²⁶ See, Mohanty, “Under Western Eyes”; Minha, *Woman, Native, Other*; Pratt, *Imperial Eyes*; McClintock, *Imperial Leather*; Narayan, *Dislocating Cultures*; Spivak, “Can the Subaltern Speak?”

¹²⁷ Said, *Orientalism*, 219.

¹²⁸ Besky, *The Darjeeling Distinction*, 119.

between American animal parks, deeply invested in the broader public parks movement, and their European counterparts at the turn of the century. However, tokenism and the celebration of colonial conquest were not the main targets of this critique. In her historical analysis of U.S. zoo-spectatorship, Hanson notes that “for American visitors such artificial surroundings distracted from the experience of observing nature.”¹²⁹ Nature in this context stands for an authentic and pure environment outside the realm of the modernizing city, preserved uncontaminated, away from urban vices and threatening decadence, and thus, evoking the renewed idea of wilderness as a site for tranquil relaxation. Haraway locates this drive for hygienic nature within the nation-building operations that strategically reinvented the American wilderness as a space suitable for moral and physical regeneration of white hetero-masculinity.¹³⁰ Additionally, Uddin traces the precise sanitary procedures that made the public parks movement’s naturalism “confidently white and white collar in orientation.”¹³¹ According to her, the construction of new wilderness as a pristine landscape available to and safe for white bourgeois citizens required first emptying, and then guarding the space from the undesirable human element – in the case of national parks, Native Americans, while in urban green spaces, African Americans, along with other ethnic minorities and poor whites, who were alienated from the pastoral ideal of nature as a space for recreation and admiration. The same spaces of wilderness – heterosexual, white, and middle-class in design – were aimed at making invisible or physically excluding queer subjects with their “unnatural behavior,” however not always successfully.

The rise of naturalistic exhibition design in North America in the twentieth century was partly owed to access to larger areas for developing zoo projects, as well as with the specifically situated ideals of nature as a refuge, carefully cultivated through vast spaces of domestic wilderness. Typically in naturalistic zoo design, emphasis is placed on expressing the geographical distribution of fauna. The idea of presenting animals in reconstructions of their natural habitats blends well with the process of molding “planetary consciousness” proposed by Pratt. As a movement away from the spatial arrangement of species after taxonomic table, the naturalistic design organizes the display as a worldly geography, giving a global overview of

¹²⁹ Hanson, *Animal Attractions*, 23.

¹³⁰ Haraway, *Primate Visions*, 29.

¹³¹ Uddin, *Zoo Renewal*, 40.

biology as a universal domain, and thus, inscribing it into colonial fantasies of domination.

The naturalistic approach in zoo design was not an American specialty, and became the most prominent architecture style in Europe by the beginning of the twentieth century. In 1913, the Secretary to the Zoological Society of London, Peter Chalmers Mitchell introduced the latest installation at the Gardens, a multi-leveled structure imitating mountains, known as the Mappin Terraces. He advertised the new design in the following way:

There is no doubt but that visitors will gain from the Mappin Terraces. They will be able to see the general panoramic effect from the pavilion, the lowest terrace and the side terrace, the gaudy water-fowl and deer below, the bears apparently free in the valleys of the mountain, and the sheep and goats on the distant peaks.¹³²

The idea was simple: instead of showcasing individual species in separate cages, the new exhibit created a panoramic view of a mountainous landscape populated by animals from mixed taxonomic groups. Predators and prey on the same display. Stripped of elaborate ornaments or decorations, architecture in this exhibit plays a functional role. Despite taking nature as its model, naturalistic design remains anthropocentric – it privileges the perspective of the human audience. More specifically, it mimics organic forms and landscapes to produce an impression of harmony between species represented as co-existing peacefully in the same space. The methods for achieving this illusionary communion with nature in the controlled environment of the zoo are strictly visual. Artificial rockwork of the Mappin Terraces hides the secret of hollowness of its staged freedom and natural harmony: wire fences and railings, ditches and moats are neatly hidden from the visitors' view, to “remove from our minds the idea of a prison, and give us a better view of the animals.”¹³³ Mitchell credits the idea of the panorama along with the innovative techniques removing any visible barriers between the spectators and wild beasts to the “genius of Carl Hagenbeck,”¹³⁴ the famous German animal dealer who introduced the idea of the “barless zoo.”

In the beginning of the twentieth century, “Hagenbeck” was a widely recognized brand: the Hamburg-based international company under this name

¹³² Chalmers Mitchell, “Zoological Gardens,” 29.

¹³³ *Ibid.*, 28.

¹³⁴ *Ibid.*

supplied most of the existing zoos, circuses, and private collectors with exotic specimens. The Hagenbeck-Wallace Circus was the second-largest circus in America, while the private Tierpark Hagenbeck near Hamburg was the first zoo without iron bars.¹³⁵ One person stands behind all these successful ventures: an international leader in wildlife trade, a world-known animal trainer, and a pioneer in naturalistic zoo design. Known as the “Hagenbeck Revolution,” this new approach in exhibiting wild animals, freed them from their cages into naturalistic enclosures, features in official historiographies as the birth of the modern zoo.¹³⁶ Even if contested for his direct involvement in imperialism, capitalist exploitation of nature, and controversial ethnographic shows, for many zoo scholars Hagenbeck’s intervention in architecture and display design marks a turning point in zoo history, when the systematic zoo gave way to the habitat zoo.¹³⁷ While in Rothfels’ analysis Hagenbeck’s enterprise paved the way for immersion exhibits widely acknowledged in contemporary zoos as the standard, for Eric Ames, it features as the origin of theme parks, like Disneyland.¹³⁸ From the contemporary perspective with zoological parks deeply invested in environmental politics and species conservation it might be difficult to imagine the origins of this institution in other exhibition sites like the amusement park, circus, freak show, or minstrel show.

The multifaceted character of Hagenbeck’s successful venture had far-reaching consequences for the legacy of the modern zoo: from colonial animal trade, through the exoticizing circus-like spectacle, to the haunting presence of the human zoo. But what are the consequences of hailing this revolution in zoo design for the sexual politics of space? On the one hand the shift to naturalistic zoo design solidified the status of zoo animals as models for the natural order saturated with sexual normativity. On the other, by removing visible barriers separating zoo-goers from zoo-dwellers, it intensified the power of gazing. As McClintock highlights, “power through being the spectacle of another’s gaze is an ambiguous power.”¹³⁹ As the barriers became more transparent or disappeared, specimens on zoological display

¹³⁵ Rothfels, *Savages and Beasts*, 8–12.

¹³⁶ Kislung, *Zoo and Aquarium History*, 102–4.

¹³⁷ Hanson, *Animal Attractions*; Baratay and Hardouin-Fugier, *Zoo*; Rothfels, *Savages and Beasts*; Ames, *Carl Hagenbeck’s Empire of Entertainments*; Braverman, *Zooland*; Chrulew, “An Art of Both Caring and Locking Up.”

¹³⁸ Rothfels, “Immersed with Animals”; Ames, *Carl Hagenbeck’s Empire of Entertainments*.

¹³⁹ McClintock, *Imperial Leather*, 157.

were made more available for visual inspection under the disciplinary gaze – a quality already rehearsed in scientific practice. The zoo allowed for voyeuristic observation.

As a contact zone specializing in translating biological truths and then laws of nature for human publics the new zoo created an illusion of reduced distance between audience and raw nature. Consequently, it became a fertile ground for mobilizing normative ideas about gender and sexuality. This proximity, cultivated through space arrangement and the possibility of tactile contact with specimens, enhanced the moral order behind the exhibit.

The “Panorama of Natural Sciences” patented by Hagenbeck in 1896 draws from taxidermic practices of sculpting habitat dioramas in Natural History Museums, where stuffed animals are theatrically arranged in same-species formations that often resemble reproductive units: a male, a female, and their offspring. These peculiar nuclear family portraits were reproduced in zoological panoramas with live specimens, turning them into instructive scenes of species heteronormativity. This is how heterosexuality blends into a background. According to Poliquin, the mesmerizing magnetism of taxidermic representations of nature is produced through a strong belief that “animals seem to offer themselves a direct access to truth, to a reality that exists above, beyond, and prior to representation.”¹⁴⁰ With creatures breathing, crawling, flying, and jumping in front of zoogoers’ eyes, this access to the primordial laws of nature seemed to be within reach. The key lies in skillfully balancing the human/nonhuman, civilized/savage, and natural/artificial boundaries.

This movement in the traffic in HumAnimals is never unidirectional. It shifts between anthropomorphizing representations that entail disciplining animal embodiment and representing it in a way that reflects desired qualities, and treating nonhuman animals as powerful models for human behavior, morality, politics, and identities. In this way, animals on display can be represented as family units, and further anthropomorphized with practices such as giving individuals human names, or even dressing them in clothes. Consider this passage from a late-nineteenth-century news report on a night visit to the Rock Creek Zoo in Washington:

The forlorn little group of spider monkeys, with their attenuated arms wrapped around each other for comfort, do not look any happier by lantern light than in the daytime. Poor little

¹⁴⁰ Poliquin, *The Breathless Zoo*.

discarded models from old Dame Nature's workshop, remnants of the time when she was experimenting in the production of the human race, they have just enough humanity to be subject to lung trouble and its other ills without enough of its attributes to have command of whisky and quinine and other the other resources of the civilized man for aiding acclimatization under extremes of temperature.¹⁴¹

Through this journalistic style of anthropomorphization the line between humanity and animality gets blurred. Readers are invited to imagine spider monkeys as a travesty of humanity, the discarded models from "Mother Nature's workshop," failed experiments in perfection. These kinds of comparisons are never innocent and reflect back onto the human hierarchies of race, class, and gender. Other simians have fascinated humans for centuries due to the idea of proximity.¹⁴²

Similarly, if a nonhuman animal displays a trait that is sought for or especially valued in the human community, it can easily become a natural given by virtue of occurring in other species. For example, fidelity in bird coupling, parental care, or male domination in some species are oftentimes eagerly projected onto the human world. Ritvo notes: "depending on the circumstances, people represented themselves as being like animals, or actually being animals. For example, worries about the concupiscence of human females structured the theory of breeding, and the emergence of racially based nationalism conditioned discussions of species, variety, and breed in animals."¹⁴³ In the zoo these shifting representations rely strongly on three-dimensional spaces as the yielding background for the spectacle of nature. However, animal bodies in the zoo are not as stable as mediums as the mounted skins in the natural history diorama. Furthermore, in the zoo, human animal bodies can be found on both sides of the fence.

Human Zoo and the Erotics of Gazing

Other specters of naturalistic design once again bind the space of the zoo to Orientalism, discussed earlier in relation to architecture. The presence of people from non-Western cultural contexts in the zoo is not only tangible through architectural correlations to far-off lands, but until the twentieth century, was realized through the institution of the human zoo. In Hagenbeck's shows, humans were fully immersed into the exhibition space, but in a very different way than in contemporary zoos –

¹⁴¹ "Midnight Out at the Zoo."

¹⁴² See, Hund, Mills, and Sebastiani, *Simianization*.

¹⁴³ Ritvo, *The Platypus and the Mermaid*, xiii.

indigenous people were part of the display, along with nonhuman animals as an integral element of the re-created natural landscape. Usually represented in exotic clothes and with hunting gear, they were casted as the prototypical “savages,” stuck in “primitive” hunter-gatherer societies. My key point is that Hagenbeck’s people shows were a theatrical re-enactment of Western fantasies about the exotic Others that relied heavily on the erotic aspect of the zoological spectacle. The subtle sexual undertones coded in the zoo space through arcane collecting and exhibiting practices, heteronormative landscape design, and a sensuous contact/touch/friction zone culminate in the human zoo. Ames, in his study of Hagenbeck’s travelling peoples shows, recalls the reception of the Nubian exhibition in 1896 by the German public: “The most powerful and enduring memory of the exhibition was that of strong mutual desire connecting German women and male performers. The show resulted, scandalously, in flirtations, physical contact, even a few marriage contracts.”¹⁴⁴

Fascination with exotic Others has always been a part of most human societies, which, throughout centuries, have developed practices of exhibiting monstrous, strange, abnormal, degenerate, or simply *different* humans. According to a number of scholars, the human zoo with its close ties to such phenomena as curiosity cabinets, circus performances, travelling troupes, ethnic shows, “negro villages,” freak shows, Great Exhibitions, menageries and zoos, can be distinguished as a mode of exhibiting that emerged in the late nineteenth century, combining science, education, theatre, and colonial domination.¹⁴⁵ As Pascal Blanchard (*et al.*) point out, it was the same processes of modernization that brought the public zoo to urban environment that shaped the emergence and rapid proliferation of the human zoo formula in just over a decade. They list the essential characteristics of this new form of performing Otherness: “the explicit exploitation of racial difference” and “the initial scientific endorsement of the human zoo.”¹⁴⁶ In their comparison to the strictly animal zoo, they write: “it was precisely at this juncture between exoticism and knowledge, between fantasy and rationality, that the human zoo appeared.”¹⁴⁷

Although showcasing humans was predominantly the domain of the circus,

¹⁴⁴ Ames, *Carl Hagenbeck’s Empire of Entertainments*, 98.

¹⁴⁵ Lindfors, *Africans on Stage*; Blanchard, *Human Zoos*; Blanchard et al., *Human Zoos*; Rothfels, *Savages and Beasts*; Poignant, *Professional Savages*.

¹⁴⁶ Blanchard, *Human Zoos*, 21.

¹⁴⁷ Blanchard et al., *Human Zoos*, 2.

freak show, or accompanied travelling animal shows, close ties between these institutions within the biopolitical network allowed for a smooth transformation of the “human zoo” spectacle into an acclaimed “ethnographic show” with scientific anointment and educational value, thus forming a proper type of amusement for bourgeois audiences. According to Rothfels, it was academic circles, and in particular societies and associations of nascent anthropology and ethnology, that backed up Hagenbeck’s people shows with their scientific authority.¹⁴⁸ The benefit was mutual: the animal trader gained a stamp of authenticity for his “ethnological expositions,” elevating them beyond the status of vulgar sideshows, while the scientists had access to “an almost unimaginably large selection of different peoples on which could be conducted the widest range of conceivable tests.”¹⁴⁹ Gathering these data took the form of compulsive measurements of body parts, scaling of eye color and hair structure, and making a photographic record of the “natives” for the sake of comparative studies. In his analysis, Rothfels focuses on these photographs and points out that commissioned photographers were instructed to bring out the “natural nakedness” of the “primitive” body.¹⁵⁰ The act of literally stripping the body of any cultural artifacts, which were crucial props in Hagenbeck’s exotic show, produced a specific kind of nudity and captive subjectivity of people represented in these so-called “ethnographic photographs.” To clarify, during the shows, performers typically displayed some levels of titillating nudity, but for the purposes of scientific examination they were asked (or made) to drop all costumes to create another type of nudity. As demonstrated by Blanchard (*et al.*), “in this attraction towards the body of the Other, the ‘savage’ body was staged in such a way that it was eroticized, displayed naked or semi-naked, and made to move in ‘ritual dances’ in a way which escaped all cannons of Western movement.”¹⁵¹ The focus on the seemingly natural nudity did not only make the nonwhite body available for visual inspection, but also constitutes the primary aspect of the racialized erotics of gazing.¹⁵²

Of course, as I mentioned earlier, a large dose of nudity and sexually charged gaze were also vividly present in the exhibition before scientists rushed in with their craniometrical instruments, scales, and photographic cameras. Rothfels argues:

¹⁴⁸ Rothfels, *Savages and Beasts*, 92.

¹⁴⁹ *Ibid.*, 93.

¹⁵⁰ *Ibid.*, 101.

¹⁵¹ Blanchard, *Human Zoos*, 20.

¹⁵² For a historical account on black females as spectators see, hooks, “The Oppositional Gaze.”

It should not be a surprise to discover that part of the enthusiasm for the people shows stemmed from a veiled and sometimes blatant erotic voyeurism. Simply, the shows provided a purportedly legitimate arena for men and women to see and to “study” sometimes almost completely naked men and women, and from the very first two shows, which “featured” the exposed breast of the nursing Sami woman, the beautiful Hadjidje, and the “devastating” nineteen-year-old Hamran warrior, the confluence of nakedness, beauty, and exoticism was to play an important role in many of the shows.¹⁵³

What is the difference between the nudity of this enticing spectacle and the scientifically distilled category of “natural nakedness”? Although both constitute highly eroticized forms of subjugation, the latter additionally produces a scientific vocabulary and evidence for theories of racial difference that dwell on the human/nonhuman boundary.

One of the earliest and most powerful examples of how the human zoo anticipating Hangenbeck’s exhibitions, blurred the boundaries of science and spectacle, humanity and animality via sexualization of the black body, is the case of Saartje Bartman,¹⁵⁴ a Khoi-Khoi woman exhibited under the name “Hottentot Venus” in the nineteenth century. Apart from performing in front of French and British audiences as part of a travelling show, her body came under scientific scrutiny with a clear focus on her sexual anatomy. More specifically, it was the apparent excess of labial tissue, which gained the medical denomination of the “Hottentot apron,” and under male clinical gaze became anomalous, primitive, and bestial sign of “degeneration.” In his *Natural History*, Georges Buffon, an eighteenth-century French anatomist describes this anatomical feature: “These Hottentots, moreover, form a species of very extraordinary savages. The women, who are much smaller than the men, have a kind of excrescence, or hard skin, which grows over the pubis, and descends to the middle of the thighs in the form of an apron.”¹⁵⁵ Sexual anatomy became the marker of racial difference.

When scientists such as Georges Cuvier, Henri Marie Ducrotay de Blainville, and Geoffroy Saint-Hilaire examined Baartman’s body, they eagerly followed the lead of their predecessor Buffon. In an attempt to classify the fascinating Khoisan, the leading French anatomists and zoologists compared her anatomic features to that of orangutans and mandrill monkeys. Sander Gilman explains: “if their sexual parts

¹⁵³ Rothfels, *Savages and Beasts*, 134.

¹⁵⁴ Her owners gave this name to her after baptizing her in England. Her real name was Sawtche. Boetsch and Blanchard, “The Hottentot Venus: Birth of a ‘Freak’ (1815),” 62.

¹⁵⁵ Buffon, *Buffon’s Natural History*, IV:296.

could be shown to be inherently different, this would be a sufficient sign that the blacks were a separate (and, needless to say, lower) race, as different from the European as the proverbial orangutan.”¹⁵⁶ In this clinical and voyeuristic gesture, black female embodiment was pathologized and became an icon of deviant sexuality and lasciviousness, approximating their possessors to nonhuman beasts. According to McClintock, “in the overexposure of African genitalia and the medical pathologizing of female sexual pleasure (especially clitoral pleasure, which stood outside the reproductive teleology of male heterosexuality), Victorian men of science found a fetish for embodying, measuring, and embalming the idea of the female body as anachronistic space.”¹⁵⁷ The space of these bodies is anachronistic in the ways it is radically pushed into the margins of humanity, and imagined as belonging to the ontogenetically earlier temporality. Bartman was not the only black woman to become a freak-show attraction across Europe in the nineteenth century, but her case became prominent and was later analyzed extensively by feminist scholars.¹⁵⁸

The “savage” body incited different types of desire, with sexual desire as the primary source of amusement. Sexual transgressions such as excessive sexual appetite, homosexuality, polygamy, incest, or bestiality were typically attributed to exotic Others, and specifically their bodies, which became markers of knowledge, defining the boundary between the civilized and the savage. At the same time, the acute hypersexualization of Bartman’s body served as a site for exercising fantasies of Western onlookers, mesmerized by the idea of excess. Alexander G. Weheliye, in *Habeas Viscus*, insists that “in the same way that black people appear as either nonhuman or magically hyperhuman within the universe of Man, black subjects are imbued with either a surplus (hyperfemininity or hypermasculinity) of gender and sexuality or a complete lack of thereof (desexualization).”¹⁵⁹ Both extremes can be easily identified within the archives of the human zoo, and the crucial function of both excess and lack lies in delimiting the norm. Gender difference marks the split between hypersexuality and desexualization.

¹⁵⁶ Gilman, “Black Bodies, White Bodies,” 216.

¹⁵⁷ McClintock, *Imperial Leather*, 42.

¹⁵⁸ Gilman, “Black Bodies, White Bodies”; Fausto-Sterling, “Gender, Race, and Nation: The Comparative Anatomy of ‘Hottentot’ Women in Europe, 1815–1817”; Crais and Scully, *Sara Baartman and the Hottentot Venus*; Dunton, “Sara Baartman and the Ethics of Representation.”

¹⁵⁹ Weheliye, *Habeas Viscus*, 41–42.

Another oft-cited story of Ota Benga, a Congolese man displayed at the Bronx Zoo in the early twentieth century, is an illustration of the desexualization of black subjects. In 1904, the explorer Samuel Phillip Verner returned from the Belgian Congo with six Batwa Pigmies to be exhibited at the St. Louis World's Fair. Benga was one of them. Two years later, Verner presented him to William Hornaday, the director of the Bronx Zoo, where Benga was placed in the Monkey House together with an orangutan and a parrot. The sign outside the enclosure read: "The African Pigmy, 'Ota Benga.' Age, 23 years. Height, 4 feet 11 inches. Weight, 103 pounds. Brought from the Kasai River, Congo Free State, South Central Africa, by Dr. Samuel P. Verner. Exhibited each afternoon during September."¹⁶⁰ Due to protests from African-American clergy, he was later presented as the zoo's employee, rather than a specimen. Nevertheless, his status in the zoo was highly ambiguous. Consider this short excerpt from a news story on Benga attacking the keepers with a knife:

Ota Benga let some of the savage nature of the African forest come out yesterday. ...The keepers were cleaning the monkey house, and Benga watched them. They were using a hose, and the stream of water filled him with amusement. One of the men turned the water upon him, and he seemed to think it a great joke. But in order to get the full benefit of the flood he decided to take his clothes off. Visitors were coming, and it would not do to let him appear dressed like his pet chimpanzee. One of the keepers prevented him from shedding his raiment. He became greatly excited and rushed to his quarters. In a minute he was back armed with an ugly looking knife...; as a punishment Ota was locked in a cage.¹⁶¹

It is clear that Benga was not treated as one of the fellow keepers of the Monkey House, but rather its inhabitant. The description is so thick with animalizing language, that one might mistake it for a report on a wild beast attacking reckless zookeepers. With closer attention, it is not the threat of a knife attack that becomes the central point of the story, but rather the threat of denudation. Unlike in the case of Bartman, the nudity of Benga was perceived as scandalous and unwanted. This is coherent with his overall media portrayal: he was often belittled and infantilized, perpetually presented as a child trapped in a man's body.¹⁶²

These two contrasting cases of the human zoo spectacle illustrate how gender, sexuality, and race are all knitted together within the structure of the exhibition, revealing the asymmetrical patterns of visibility and libidinal erotics of the zoological

¹⁶⁰ "Man and Monkey Show Disapproved by Clergy."

¹⁶¹ "Ota Benga Attacks Keepers."

¹⁶² Kidd, "Inventing the 'Pygmy,'" 409.

spectacle.¹⁶³ The key thread weaving through both stories is the promiscuous proximity to nonhuman animals, activating the registers of the beast, savage, anomalous, and perverted. Although the issue of the erotics of gazing appears quite frequently in writings about the zoo, it usually constitutes an extended critique of the visual aspect of zoo spectatorship and wildlife captivity, lacking any deeper engagement with the intricacies of site-specific construction of sexuality and its political consequences. While some authors criticize zoo spectatorship as inherently voyeuristic,¹⁶⁴ others eagerly utilize the metaphor of pornography.¹⁶⁵ For instance, Ralph Acampora analyses the phenomenological structure of the animal spectacle and defines it as a “visive violence” and “zoöscopic pornography.”¹⁶⁶ For him, “the institution inculcates structurally perverse sorts of relations with a pornographic grammar.”¹⁶⁷ This kind of argumentation features pornography as an inherently pathological phenomenon, and is aimed at discrediting the zoological spectacle as a low, shameful, and distorted form of experiencing nature. Paradoxically, this is the flipside of the nineteenth-century moral claim about the purifying and dignifying effects of engaging with nature in the zoo. This approach stems from analyzing the zoo as a surveillance institution that obviously privileges vision as a means of control, and discusses the act of looking at animals in the zoo in terms of the “exhibitionary complex”¹⁶⁸ or Panopticism.¹⁶⁹ However, a strictly visual take on the issue of erotics of gazing obscures the racializing aspect of exhibiting exotic Others, as well as sidesteps the poignant materiality of this process.

In order to attend to the uncomfortable tension palpable between the categories of intimacy and enslavement, human and inhuman, sexual and sexualized, I suggest turning to what Hortense Spillers calls “pornotroping” in her analysis of the display of black suffering in the Middle Passage and plantation slavery. She writes:

This profound intimacy of interlocking detail is disrupted, however, by externally imposed

¹⁶³ Rikke Andreassen in her study of the Danish exhibitions of “exotic people” held at the Copenhagen Zoo at the turn of the century demonstrates how in this context men on display were also sexualized. Andreassen, “Representations of Sexuality and Race at Danish Exhibitions of ‘Exotic’ People at the Turn of the Twentieth Century.”

¹⁶⁴ Malamud, *Reading Zoos*, 220.

¹⁶⁵ See also, Jensen and Tweedy-Holmes, *Thought to Exist in the Wild*, 96.

¹⁶⁶ Acampora, “Zoöpticon: Inspecting the Site of Live Animal Infotainment”; Acampora, “Zoos and Eyes.”

¹⁶⁷ Acampora, “Off the Ark: Restoring Biophilia,” 3.

¹⁶⁸ Bennett, *The Birth of the Museum*.

¹⁶⁹ Braverman, “Looking at Zoos.”

meanings and uses: (1) the captive body as the source of an irresistible, destructive sensuality; (2) at the same time – in stunning contradiction – it is reduced to a thing, to *being for* the captor; (3) in this absence *from* a subject position, the captured sexualities provide a physical and biological expression of ‘otherness’; (4) as a category of ‘otherness,’ the captive body translates into a potential for pornotroping and embodies sheer physical powerlessness that slides into a more general ‘powerlessness.’¹⁷⁰

The term itself derives from ancient Greek *porne* for “female slaves sold for prostitution,” and *tropos* for “that which turns,” and also signifying a figure of speech.¹⁷¹ As a verb, pornotroping denotes the sexualized becoming flesh of the captive body.

Ethnographic photography discussed earlier was aimed at capturing the body in its most natural state, which in the context of the human zoo converted the naked body into a not-so-human substance to be investigated under the scrutiny of the scientific eye. Most importantly, pornotroping produced the physiognomic model for racial difference. Similarly, the display of Sarah Baartman and Ota Benga were simultaneously sources of sensual desire and radical alterity for their white Western audiences, turning their captive bodies into flesh and ritualistically stripping away their subjectivity, agency, and humanity. Pornotroping captures the violent interplay of dehumanization and sexualization of the human zoo as a display of subjugated Others, predicated on exploiting the categories of degeneration, primitiveness, and abnormality, which also dwell on the boundaries of human/inhuman and civilized/savage. Pornotroping pushes the argumentation beyond the critique of voyeurism and towards a fleshy brutalization of the body brought by the exotic/erotic amalgam.

I utilize Spillers’ vocabulary to expose the joint production of gendered, racialized, and sexualized natures in the zoological exhibition, and to map out the topologies of power binding together human and nonhuman embodiment through the eroticized gaze. Weheliye argues that Spillers’ notion of pornotroping “unconceals the literally bare, naked, and denuded dimensions of bare life, underscoring how political domination frequently produces a sexual dimension that cannot be controlled by the forces that (re)produce it.”¹⁷² This might seem to clash with a strictly biopolitical perspective, where sexuality is the primary object of control, but it reveals queer

¹⁷⁰ Spillers, “Mama’s Baby, Papa’s Maybe,” 67.

¹⁷¹ Weheliye, “Pornotropes,” 72.

¹⁷² Weheliye, *Habeas Viscus*, 90.

potentiality looming even in spaces permeated with violence. This added sexual dimension is crucial for my analysis, because racial taxonomy is deeply inscribed into the naturalizing sexual discourses that utilized the idea of interspecies kinship for eugenic practices and racist politics in the twentieth century. Additionally, locating these discourses in the zoo explores the troubled kinship between categories of race, sexuality, gender, and species and its consequences for any human identity-based politics drawing from animal behavior, embodiment, or imagery to be found within the zoological panoptical structures. In the chapters that follow, I am not so much interested in constructing a well-balanced theoretical symmetry between “humanizing animals” and “animalizing humans,”¹⁷³ but rather in attending to the visceral vicissitudes of modernist subjectivity, and more specifically, to the possibility of queer-feminist hacking of this wobbly bio-semiotic structure.

I analyze the erotics of gazing and its potential for pornotroping through the human exhibition – although it is seemingly not the focal point of the zoological exhibition – to show how sexuality is key for the disciplinary power that incarcerates certain bodies and defines the lines between humanness and animality, savage and civilized, self and other. Pleasure and violence are perversely interlaced in this process hailing the zoo as the paradigmatic biopolitical space. The human zoo reveals the erotic aspects of knowledge production, wherein sexual perversion is forcefully mapped onto foreign bodies to denote monstrous anomaly and bestial promiscuity, and thus, secure the humanity of the observers. In the following chapters I rather focus on representations of nonhuman animals that rehearse the logics of pornotroping and are cast as the markers of the natural order further transposed onto the social order. However, the haunting presence of the human zoo reverberates in those animal stories. As a space dedicated to the production of norms the zoo becomes the modernist apparatus for naturalizing performative notions of sexuality, gender, and race, and disciplining human and nonhuman bodies. Instead of straying from resurgent “perverse relations” in the zoo, my analysis seeks them out as potentially queer interruptions of normative orders.

In this chapter, I analyzed the space and spatiality of the zoo through concepts of wonder, queer ecology, contact zone, and pornotroping. I started with mapping out

¹⁷³ Wolfe, *Animal Rites*, 104.

the idea of heterosexuality as a background in the historical process of exhibiting nature to highlight the spatial character of sexual norm-making taking place outside of explicitly sexual situations. By situating the diverse processes of shaping the space of the zoo in the larger contexts of modernization and colonization, I attended to the ways specimen arrangement, architecture, and landscape design not only reflect the societal norms about sexuality, race, gender, and class, but also constitute them.

Chapter 2. (Dis)Order

No one has imagined us. We want to live like trees, sycamores blazing through the sulfuric air, dappled with scars, still exuberantly budding, our animal passion rooted in the city.
— Adrienne Rich “Twenty-One Love Poems”

In 1969, the British zoologist Desmond Morris published *The Human Zoo*, a sociobiological study of human behavior in the modern urban environment, paralleled with observations on animal lives in captivity. In the introduction, he spells out his concerns over the perils of modern civilization:

Under normal conditions, in their natural habitats, wild animals do not mutilate themselves, masturbate, attack their offspring, develop stomach ulcers, become fetishists, suffer from obesity, form homosexual pair-bonds, or commit murder. Among human city-dwellers, needles to say, all of these things occur.¹⁷⁴

As they relate to nonhuman animals, in most cases he was wrong. Over the past two decades, researchers in biological and ethological studies have taken up all of the neglected sexual behaviors Morris lists as unnatural, including homosexuality, masturbation, and fetishism. In doing so, these researchers have produced overwhelming records of such behaviors, observed both *ex* and *in situ*.¹⁷⁵ Nevertheless, Morris uses the artificial character of the zoo as a central pillar of his argument, asserting that the urban environment can become a cause of degeneracy for “naturally” fit, healthy, and heterosexual creatures.

Morris is one of the most prominent authors in human sociobiology, a scientific field directly linking human social behavior with the evolutionary mechanisms of natural and sexual selection. As a member of the Zoological Society of London, he was responsible for its television and film unit. Although an outspoken critic of the institution of the zoo, throughout the 1960s he was a frequent guest at the London Zoo and was featured in the weekly program *Zoo Time*.¹⁷⁶ His paralleling of city-dwelling humans and zoo nonhumans in relation to population density is no doubts racially loaded, as the former, brought up in the mid-twentieth century,

¹⁷⁴ Morris, *The Human Zoo*.

¹⁷⁵ See, Bagemihl, *Biological Exuberance*; Zuk, *Sexual Selections*; Roughgarden, *Evolution's Rainbow*; Sommer and Vasey, *Homosexual Behaviour in Animals*; Poiani, *Animal Homosexuality*.

¹⁷⁶ *Zoo Time*.

invoked fears of urban sprawl and the housing crisis faced by many Western metropolises.¹⁷⁷ His “human zoo” is a metaphor for the confinement of the modern urban environment, playing off complex racial dynamics deeply inscribed in the metropolitan tissue. In his Malthusian vision of the modern city, undergoing a dramatic rise in population, Morris specifically refers to the areas of slums, ghettos, and even “ganglands” as exemplary spaces of deviation, usually inhabited by low-income people of color. For him, these spaces serve as potent parallels to the cold and pathological functionalism of the zoo.

In the middle of the twentieth century, explanations and remedies for tensions resulting from increased urban populations were heavily influenced by scientific experiments on animals, like a 1960s study on overcrowding by John B. Calhoun.¹⁷⁸ He describes the result of his laboratory experiments on rats as a collapse in animal social behavior, or “the behavioral sink.” This term further reverberated in sociology and psychology as an animal model for societal decline – an analogy to human behavior. Morris’ list of pathological behaviors in zoo animals resulting from captivity mirrors that enumerated by Calhoun in his study:

The consequences of the behavioral pathology we observed were most apparent among the females. Many were unable to carry pregnancy to full term or to survive delivery of their litters if they did. An even greater number, after successfully giving birth, fell short in their maternal functions. Among the males the behavior disturbances ranged from **sexual deviation** to cannibalism and from frenetic overactivity to a pathological withdrawal from which individuals would emerge to eat, drink and move about only when other members of the community were asleep (emphasis mine).¹⁷⁹

Whereas both accounts focus on sexual and reproductive behaviors, I see Morris’ inventory of deviant behaviors attributed to both zoo animals and human urbanites as an afterimage of nineteenth-century anxieties about the state of modern civilization. Paradoxically, the latter prescribed zoo visits as a healthy recreation against the unnatural vices of the overcrowded metropolis, while Morris presents the fate of zoo-dwellers as a cautionary tale of social development gone awry in the thicket of the “concrete jungle.”

Although the discourse of sexual perversion as an “unnatural vice” is prominent in both narratives, the sociobiological take on what it identifies as

¹⁷⁷ Uddin, *Zoo Renewal*, 51.

¹⁷⁸ Calhoun, “Population Density and Social Pathology.”

¹⁷⁹ *Ibid.*, 54.

civilizational pathologies presents the assumed artificiality of the modern city as the factor contaminating the “true wild nature” of imprisoned animals. These creatures are thought to be inclined towards “natural” reproductive sexuality. Thus, in the long run, sociobiological reasoning bears a classificatory bias, upholding reproductive sexuality as the requisite evolutionary principle. Not straying from other ethological studies of the time, *The Human Zoo* features same-sex sexual behavior among nonhuman animals as an inherently aberrant violation of the natural order – an abnormal product of captivity. By dismissing the zoo as a credible source of knowledge about “natural behavior” on these grounds, this argument sets up wilderness as the perfectly pure state of natural heterosexuality and gender normativity. Moreover, this narrative utilizes the notion of human relatedness to other animals to set up a hierarchy and, as Claire Colebrook contends, employs evolution “as a figure to explain morality, politics, language, art and technology, all as conducive to the furtherance of the human organism.”¹⁸⁰

In fact, the narrative employed by Morris, and especially his equation of the human zoo with the modern city, is built upon the metaphor of society as a living organism, where each element of social organization has its function in maintaining the homeostasis of the social body.¹⁸¹ Emile Durkheim famously developed this basic sociological concept in the nineteenth century. In his classic monograph on suicide, he uses the term “anomy” to describe the pathological state of lawlessness, or societal disorganization, resulting from the break up of organic solidarity and the weakening of social bonds between alienated individuals in postindustrial societies: “Anomy indeed springs from the lack of collective forces at certain points on society; that is, of groups established for the regulation of social life.”¹⁸² In other words, anomy is a state of derangement, mismatch, and disorder.

In order to prove that suicide is a social fact, rather than an individual tragedy, Durkheim analyzed both the general conditions driving the disintegration of the social fabric and records from asylums and prisons detailing psychological disorders. But it is necessary here to take a moment to understand the various meanings denoted by disorder. The *Oxford English Dictionary* defines the noun “disorder” as an “(1)

¹⁸⁰ Colebrook, “Introduction: Extinction. Framing the End of the Species.”

¹⁸¹ For an overview of interwar theories of organicism in biological sciences, especially embryology, see, Haraway, *Crystals, Fabrics, and Fields*.

¹⁸² Durkheim, *Suicide*, 382.

absence or undoing of order or regular arrangement; confusion; confused state or condition; (2) An irregularity of conduct; a disorderly act or practice; a misdemeanor; (3) A disturbance of the bodily (or mental) functions; an ailment, disease.”¹⁸³ As a verb “disorder” seems to have an even stronger emphasis on the immoral element: “(1) To make morally irregular; to vitiate, corrupt; to mar, spoil; (2) To violate moral order or rule; to break loose from restraint, behave in an unruly or riotous manner; to transgress the bounds of moderation, go to excess. *Obs.*”¹⁸⁴ Disorder thus can refer both to a lack of arrangement and to a mental state or illness.

With the title of this chapter, I want to explore the tensions between order and disorder, patterns and irregularity, hierarchy and excess, norms and abnormality. By order, I refer to classificatory schemes as the fundamental framework for collecting animals and the development of the zoo in the nineteenth century. These species taxonomies, specifically those relying on categories of biological sex and sexuality, became the keystone for theories of sexual disorders developed in the fields of psychiatry and sexology around the same time. Although these two areas (zoology and sexology) might seem distant, in theorizing (dis)order my aim is to show the convergence of biological theories of species development with early sexological studies of sexual perversions.

I emphasize the zoo’s involvement in the Darwinian evolutionary narrative developed in the nineteenth century, which, besides having other ramifying effects on scientific cultures, gave traction to sociobiological claims, including those presented later by Morris. More specifically, I examine the relationships between species taxonomies and sexual classifications that developed almost in parallel at the turn of the century. In my analysis, the zoo is not only a space where taxonomies are visualized, but rather forms a biopolitical apparatus rendering palpable the classificatory approach that took precedence over other organizational principles in modern science and continues to radiate into other realms of knowledge production, utilizing nature as the material substrate for ethics and politics. Early psychiatric classifications of “sexual disorders,” taking their cue from species taxonomies, critically outline the boundaries of modern sexual subjectivities.

¹⁸³ “Disorder, N.”

¹⁸⁴ Funke, “Navigating the Past.”

In chapter 1, I drew attention to different guiding principles that shaped the spatial arrangement of animal collections throughout history, and therefore, constituted differently imagined orders of exhibiting natural phenomena. From the apparent chaos of random bestiaries, through alphabetization and groupings according to geographical distribution, kind, or anatomical affinity, these models of scientific classifications emerged as the dominant systematic order of collections. According to Ritvo, by the eighteenth century “scientific classification was hailed as both symbol and agent of a larger intellectual triumph, one that could ultimately reverse the traditional relationship between humans and the natural world.”¹⁸⁵ Whereas the previous chapter illustrates how zoological gardens accommodate the taxonomic order spatially, this chapter grapples with the ways in which these classifications of living beings simultaneously solidify the notion of species as an organizing category in life sciences and catalyze the unruly proliferation of “deviant ontologies.” For Foucault to argue that in the nineteenth century the homosexual emerged as a “species” points not only to the generative character of psychiatric catalogues of sexual perversions, but also implies that sexuality was conceived as a strictly taxonomic category surfacing in the capacious contact zone between human and nonhuman. I attend to these kinds of overlaps within the taxonomic order to highlight potent interconnections between zoological and sexological classifications that retain the queer tension between the norm and its outside. Through the notion of (dis)order – one encompassing classificatory orders and psychiatric disorders – I aim at destabilizing the discourse of perversion, like the one presented by Morris, that dismisses queer potentiality under captivity as unnatural and abnormal.

On the Origin of Queer Species

A queer researcher new to zoo history might be startled upon discovering that the first accounts using the term “queer animals” date back to the nineteenth century. In 1884, the *Baltimore Sun* reported on “Queer Animals from Swan Island” that arrived onboard Florence Rogers schooner on its way back from the Caribbean: “Capt. Davis brought home with him from Swan Island two strange animals, for which he can find no name.”¹⁸⁶ In 1890, a pair of “queer animals of the deep” was exhibited in a wooden tank in Washington. These sea creatures, known as manatees or

¹⁸⁵ Ritvo, *The Platypus and the Mermaid*, 18.

¹⁸⁶ “Queer Animals from Swan Island.”

sea-cows, were the first ones to survive more than a week after being captured, and thus could be displayed to curious crowds gathering to see a rare and almost extinct beast that “seems to combine the qualities of the seal, the whale, and the land cow.”¹⁸⁷ Other historical accounts of “queer animals” from the turn of the twentieth century vary from news on new shipments of live specimens gathered for natural history museums during colonial-scientific expeditions,¹⁸⁸ through descriptions of wondrous creatures from distant lands whose looks or behaviors amused human viewers, to humorous stories about a zoo elephant showing a “queer taste” for beer or a long-necked giraffe chewing flower-decorated “garden hats” off the heads of fashionable lady-visitors to the zoo.¹⁸⁹

A closer examination of these archival records reveals that in the late nineteenth and early twentieth centuries, when in reference to nonhuman animals, the word “queer” was used as a denomination for strange, mysterious, or peculiar characteristics of exotic creatures usually brought to the eyes of Western natural history enthusiasts as wildlife cargo from colonized lands. In the Anglophone context, the connotation of the word “queer” with same-sex sexual behavior, and what we would now call non-normative gender and sexual identities, came about in the early twentieth century initially as a neutral term employed by men having sex with men; it was only later that it gained a pejorative meaning. Its further reclamation as a marker of anti-assimilationist politics had to wait until the end of the century. Georges Chauncey, who studies male homosexual subculture in New York at the turn of the twentieth century, argues that at that time multiple sexual taxonomies coexisted as self-identification categories, rather than externally imposed systems of classification. He positions the use of the word “queer” in relation to homosexuality within the historically situated processes of sexual identity formation:

By the 1910s and 1920s, men who identified themselves as different from other men primarily on the basis of their homosexual interest rather than their womanlike gender status usually called themselves “queer.” ... Many queers considered faggot and fairy to be more derogatory terms, but they usually used them only to refer to men who openly carried themselves in an unmanly way. It was the effeminacy and flagrancy, not the homosexuality, of the “fairies,” “faggots,” or “queens” that earned them the disapprobation of queers.¹⁹⁰

According to Chauncey, it was these internal divisions that gave ground to medical

¹⁸⁷ “Queer Animals of the Deep.”

¹⁸⁸ “Queer Animals Arrive on Ship.”

¹⁸⁹ Weekly, “Animals Show Queer Tastes.”

¹⁹⁰ Chauncey, *Gay New York*, 101.

classifications of sexuality, rather than the other way around. Of course, these classifications were strictly human. What about animal sex? Were nonhumans folded into those early taxonomies? Then what is the relation between exhibiting the strange, weird, queer animal specimens and the forging of sexual identity?

Non-reproductive sexuality in the animal kingdom was an unspoken referent until it became part of the naturalistic evidence repertoire for early sexological and criminological classifications in the nineteenth century. Animal husbandry and livestock management handbooks structured early studies of animal sexual behavior on breeding. From early ethological studies same-sex sexual behavior of nonhuman animals was deemed pathological, both as non-reproductive and unnatural. According to Paul L. Vasey and Volker Sommer, “research conducted throughout the 1890s purported that an absence of opposite-sex partners and artificial confinement could ‘force’ individuals to choose same-sex mates.”¹⁹¹ The notion that sexual “abnormalities” in animal kingdom were a result of captivity became a scientific keystone for latter claims pathologizing homosexual behavior among humans, thus, implicating the zoo as an important referent to human sexuality formation. First, sexologists based their research on studies of people in various forms of captivity: prisoners, patients of asylums, and students in boarding schools. For example, the Italian father of criminology Cesare Lombroso categorized sexual inversion as a crime resulting from a reversion to a “savage” state – a term containing both animalistic and racial undertones.¹⁹² Lombroso lists “unnatural vices” in horses, donkeys, cattle, insects, fowl, dogs, ants, and in “primitive societies” as evidencing the hereditary and degenerate character of same-sex sexual behavior, specifically pointing towards a hypothesis on the limited access to sexual partners in captivity.¹⁹³ Morris’ claim about zoo captivity leading to pathological behavior in animals, including homosexuality, seems then to echo this belief.

What conjoins “deviations” (disorders) and taxonomies (order) is a tangible, lively bloodstream that runs across human and nonhuman bodies, one that can be transfused between and out of these bodies in the discursive-material practice of what I call taxidermic taxonomy. Taxidermic (or taxidermic-like) handling of bodies and

¹⁹¹ Sommer and Vasey, *Homosexual Behaviour in Animals*, 4.

¹⁹² Lombroso, *Criminal Man*.

¹⁹³ Symons, *A Problem in Modern Ethics Being an Inquiry into the Phenomenon of Sexual Inversion*, 62.

body parts underpins any taxonomic table or diagram: drying and pressing plants for herbariums; skinning and stuffing animal bodies for cabinets, museums, and zoos; measuring body parts and examining the inner organs of criminals, perverts, and deviants for sexological and medical charts. Taxonomic methodologies are fleshed out by these ubiquitous practices that run across different bodies. Although taxidermic taxonomy might seem centered around a morbid procedure of draining the life out of the subjects it dissects, I intentionally use a not-so-innocent metaphor of the bloodstream here for two reasons. First, to point to a bodily fluid that, from the nineteenth century onwards functions in scientific and popular discourses as the essence of vitality, a symbol for family, descent, and heredity, as well as a primary substance of kinship structures further extended to the idea of the nation and race. Second, the *bloodstream* is a dynamic metaphor that connotes intense traffic between these imaginary and symbolic qualities circulating within the social body. According to Haraway, “the existence of progress, efficiency, and hierarchy were not in question scientifically, only their proper representation in natural-social dramas, where race was the narrative colloid or matrix left when blood congealed.”¹⁹⁴ She asserts that the early twentieth-century bloodline taxonomies were as much about race as they were about sex. The issues of reproduction, sexual hygiene, and public health became the vessels and veins into which the bloodstream, mixing race and sex, was pumped by the pulsing scientific discourses of evolution, eugenics, and sexology.

The records of “queer” animals, understood as bizarre peculiarities, might not prove to be the most helpful in delineating the origins of the contemporary fascination with non-normative sexual behavior in animals. Nevertheless, they should be still regarded as an important genealogical trope in the shifty histories of how zoo cases of “lesbian” penguins, “gay” elephants, “queer” hyenas, and “straight” pandas surfaced in public discourses in recent years. After all, the joint production of early taxonomic divisions, the emergence of the category of species, colonialist explorations in search of natural wonders (and resources), and the scientific-zoological gaze of naturalists and first zoogoers were all fueled by the allure of the uncanny beasts that seemed to exist outside of the norm. Those that could not be identified or classified – that is to say, those that could not fit into any known category, as well as those with eerie looks, strange anatomy, rare status, or extraordinary behavior, sometimes crossing the

¹⁹⁴ Haraway, “Race: Universal Donors in a Vampire Culture,” 252.

boundary of what a wild beast was supposed to be like – those were the “queer” animals exhibited at the turn of the twentieth century. On an epistemological level of analysis, “queerness” as a site of spectacularization of the eccentric specimens in the zoo not only directly links back to the mode of exhibiting natural phenomena structuring *Wunderkammern*, menageries, circuses, and travelling freak shows (all exploiting the category of monstrosity), but also to the sexological classifications of the abnormal. The changing order of zoological collections allowed for transformation of “queerness” understood as strangeness, oddity, or peculiarity, capable of exciting wonder and desire, into a more standardized category encompassing sexual difference, yet without abandoning the initial craving for monstrous otherness.¹⁹⁵

Oftentimes, it was precisely their weirdness that made many creatures captured in the wild worthy of zoological display. “Rareness,” too, counted as a category for the purpose of exhibiting. Previously unknown animals, or rarely occurring ones, were especially precious for collectors and naturalists. Interestingly, the category of endangerment, the *modus operandi* of contemporary zoos, started functioning from the beginning of the twentieth century. Creatures close to extinction were considered a valuable “natural resource” for early animal collectors: “An American dealer, not long ago, made a special trip to White Bay, New Zealand, for the purpose of procuring a kind of lizard called the ‘aphenodon,’ which is regarded by scientists as a wonderful curiosity, inasmuch as it is the only survivor of an entire order of reptiles all the other genera and species having long since gone extinct.”¹⁹⁶ New definitions of the “wondrous,” equating it with foreignness (the kangaroo,¹⁹⁷ the platypus,¹⁹⁸ or the laughing jackass/kookaburra¹⁹⁹), replaced those based around physical anomaly (the albino or the two-headed).

In *The Platypus and the Mermaid*, Ritvo attends to the simultaneous fascination with, and classificatory confusion posed by, Australian fauna, especially monotremes (egg-laying mammals). These creatures, combining characteristics of different classes challenged the boundaries of established classificatory systems: the platypus was a furry, duck-billed creature that hatched eggs. Nineteenth-century

¹⁹⁵ Shildrick, *Embodying the Monster*.

¹⁹⁶ “Some Queer Animals.”

¹⁹⁷ “Kangaroo Found Queer Animal.”

¹⁹⁸ Moyal, *Platypus*.

¹⁹⁹ “A Queer Animal.”

taxonomists were conflicted whether it belonged to quadrupeds, mammals, birds, reptiles, a new class, or was a taxidermic “fabrication.”²⁰⁰ Ritvo notes that, “what guaranteed the continuing appeal of these animals was the fact that their oddity was not confined to the merely physical but extended to the level of theory or system.”²⁰¹ Due to their atypical reproductive system, these (dis)ordered animals, now classified as marsupials – an infraclass of mammals – epitomize what in the eighteenth century became the key to the taxonomic order: sexuality. Londa Schiebinger demonstrates how the origin of the term *Mammalia*, from the female reproductive organ (mammary glands) and adopted in Linnaean systematics, centralized sexual category on a systemic level and had far-reaching political consequences. According to her, it “helped legitimize the restructuring of European society by emphasizing how natural it was for females – both human and nonhuman – to suckle and rear their own children.”²⁰² In order to trace how zoological taxonomies became focused on sexuality, it is necessary to dig deeper to the very roots of modern classificatory systems that would order not only animals, but also minerals and plants.

Botanical Sex

Although finding an all-encompassing order in the natural world was a longtime desire shared by philosophers, collectors, and naturalists, it is the eighteenth century that has repeatedly been hailed as the great age of classifications. For Foucault, the “classical age is not merely the discovery of a new object of curiosity; it covers a series of complex operations that introduce the possibility of a constant order into a totality of representations. It constitutes a whole domain of empiricity as at the same time *describable* and *orderable*.”²⁰³ However, what is at stake here is the way specific taxonomies, along with their metaphorical and material seedlings, became interpretative frameworks for newly budding scientific disciplines (like sexology later in the nineteenth century) and gave direction to their research methodologies. Haraway notes that in a broad view, “Linnaeus’s taxonomy was a logic, a tool, a scheme for ordering the relations of things through their names.”²⁰⁴ More importantly, it was a quantifiable epistemology critically based on sexuality. In zoological

²⁰⁰ Schiebinger, *Nature’s Body*, 50.

²⁰¹ Ritvo, *The Platypus and the Mermaid*, 6.

²⁰² Schiebinger, *Nature’s Body*, 74.

²⁰³ Foucault, *The Order of Things*, 172.

²⁰⁴ Haraway, *Simians, Cyborgs, and Women*, 2013, 81.

classifications, the gradual abandonment of the seventeenth-century class *Quadrupeds*, popularized by John Ray among others, in favor of *Mammalia* coined by Linnaeus, was in fact a major shift from a categorization according to locomotion to one based on reproduction. In this sense, the eighteenth century was not only the age of the table, but also the age of putting sex into the discourse at a primary level of scientific classifications and species definitions.

As Jim Endersby notes, “the world existed in the herbarium, but in a more manageable and orderly form than it existed in the field; every classifier played Adam’s role, giving names to the plants God created, but in the manageable, miniature world of the herbarium, the systematist *was* God.”²⁰⁵ Some of the biggest accomplishments in this Adamic task have been attributed to the eighteenth-century Swedish naturalist, Carl Linnaeus. His new systematics and the introduction of binomial nomenclature proved both revolutionary and was contested within European natural history scientific circles.²⁰⁶ One of the most controversial aspects of Linnaean new botanical language was its erotic overtone, especially given its author’s deep religious devotion.²⁰⁷ Simply put, the garden seen through the lens of Linnaean taxonomy became a place saturated with floral erotica. In his early essay from 1729, Linnaeus develops an erotic analogy between plant and human sexuality:

Love comes even to the plants. Males and females...hold their nuptials...showing by their sexual organs which are males, which females. The flowers’ leaves serve as a bridal bed, which the Creator has so gloriously arranged, adorned with such noble bed curtains, and perfumed with so many soft scents that the bridegroom with his bride might there celebrate their nuptials with so much the greater solemnity. When the bed has thus been made ready, then is the time for the bridegroom to embrace his beloved bride and surrender himself to her.²⁰⁸

With excessive anthropomorphism, the Swedish botanist suffused his scientific treatise with provocative references to human sexuality. Elaborate descriptions go far beyond conjugal fidelity of the petaline “bridal bed,” and also include “promiscuous intercourses,” “clandestine romance” and “barren concubines.”

In 1789, Erasmus Darwin, an early proponent of making sexual reproduction the cornerstone of natural history, in a tribute poem titled “The Loves of Plants,” mimics Linnaean style of graphically comparing plant sexual reproductive systems

²⁰⁵ Endersby, *Imperial Nature*, 153.

²⁰⁶ Müller-Wille, “Systems and How Linnaeus Looked at Them in Retrospect.”

²⁰⁷ Schiebinger, *Nature’s Body*, 30.

²⁰⁸ Linné, “Praeludia Sponsaliorum Plantarum.”

with human sexuality. As Janet Brown notes, “although Darwin was interested in describing accurately the reproductive structures and habits of plants, his poem focused largely on the sexual and social behavior of women.”²⁰⁹ Brown sees this strong focus on female sexuality as structuring Darwin’s vision of botany as a science for gentlemen. Nevertheless, in 1834, John Lindley, an English horticulturalist and a critic of Linnaean systematics, wrote in the preface of his popular botanical guide *Ladies’ Botany*: “... no one has, as yet, attempted to render the unscientific reader familiar with what is called the Natural System, to which the method of Linnaeus has universally given way among Botanists.”²¹⁰ Throughout the eighteenth century, the garden was imagined as a safe haven for genteel women, as long as their modest interest in botany was purely aesthetic, and not too scientific.²¹¹ According to Schiebinger, “after Linnaeus the study of plants seemed to require more of a focus on sexuality as might seem suitable to ladies.”²¹² Nevertheless, Lindley based his handbook on a system that he adamantly opposed, and addressed it to “those who would become acquainted with Botany as an amusement and a relaxation,”²¹³ mostly due to its simplicity.

The Linnaean system of classification rests on the idea of sexual difference, and stems from the newly acknowledged notion that plants can also reproduce sexually. This mathematically precise, yet fairly easy to apply system of identifying and allocating a species is based on the sexual morphology of plants, and more specifically on counting the numbers of stamens and pistils in the flower. For Linnaeus, the stamens correspond to husbands (*andria*) and denominate the class of a given specimen, while its pistils represent wives (*gynia*). As with actual women in eighteenth-century society, they were ascribed to the lower rank of taxonomy, that of order. Relations between these sexual organs were described as various types of plant marriages (*nuptiae plantarum*). Linnaean botanical taxonomy accommodated a variety of marital constellations: from *Monoecia*, where male and female flowers are located separately on the same plant, through *Polygamia*, with hermaphrodite and

²⁰⁹ Browne, “Botany for Gentlemen,” 607.

²¹⁰ Lindley, *The Ladies’ Botany of Professor Lindley*, iii.

²¹¹ An opposing argument is presented by a number of scholars, who argue that thanks to the imagined feminine character of the study of plants, many women gained access to the scientific profession through botany. See, Allen, “The Women Members of the Botanical Society of London, 1836–1856”; Shteir, “Linnaeus’s Daughters: Women and British Botany.”

²¹² Schiebinger, “The Philosopher’s Beard: Women and Gender in Science,” 196.

²¹³ Lindley, *The Ladies’ Botany of Professor Lindley*, iv.

unisexual flowers resting on the same plant, to *Cryptogamia*, or the “secret marriage” of plants that lack flowers (algae, lichens, ferns and mosses). Still, the key to all these conjugal unions was the heterosexual holy matrimony. Schiebinger recognizes that sexual metaphors and analogies popularized in Linnaean botany had far-reaching consequences for other domains of science, like zoology and medicine, as well as politics. She writes:

It is possible to distinguish two levels in the sexual politics of early modern botany – the *implicit* use of gender to structure botanical taxonomy and the *explicit* use of human sexual metaphors to introduce the notions of plant reproduction into botanical literature. ... (T)he sexual politics of botany in the eighteenth century cut deeply into the political landscape, having ultimately to do with the European-wide revolution in scientific views of sexual difference that took place in the upheavals leading up to the American and French revolutions.²¹⁴

As a politically fertile ground, Linnaean botany solidified heteronormative sexual categories as an epistemological system. Its use of sexual metaphors was materially embodied in natural history collections.

As the Linnaean taxonomic model gained currency in the scientific world, especially among amateur naturalists, its sexual systematic key flourished in institutions specializing in displaying and ordering natural phenomena. Linnaeus based his findings on his large botanical collection, and gained access to zoological collections as a superintendent of the garden and private zoo of George Clifford, the director of the Dutch East India Company.²¹⁵ Foucault stresses the importance of herbariums, as well as botanical and zoological gardens, for the eighteenth-century system of knowledge:

It is often said that the establishment of botanical gardens and zoological collections expressed a new curiosity about exotic plants and animals. In fact, these had already claimed men’s interest for a long while. What had changed was the space in which it was possible to see them and from which it was possible to describe them. To the Renaissance, the strangeness of animals was a spectacle: it was featured in fairs, in tournaments, in fictitious or real combats, in reconstitutions of legends in which the bestiary displayed its ageless fables. The natural history room and the garden, as created in the Classical period, replace the circular procession of the ‘show’ with the arrangement of things in a ‘table’. What came surreptitiously into being between the age of the theatre and that of the catalogue was not the desire for knowledge, but a new way of connecting things both to the eye and to discourse. A new way of making history.²¹⁶

Although Foucault hints at the zoo as the origin of natural history’s systematic

²¹⁴ Schiebinger, *Nature’s Body*, 13.

²¹⁵ Farber, *Finding Order in Nature*, 8.

²¹⁶ Foucault, *The Order of Things*, 143.

arrangement of animal species, it is hard to determine whether the accumulation of different creatures in one space influenced the taxonomic system, or zoological collections have been structured according to this order. It is rather an intra-active process that binds the materiality of animal display with the taxonomic system discourse. At the same time, a closer historical analysis of zoological collections reveals they were far from embodying exhaustive catalogues of the natural world, or adhere to the linearity of the table or diagram – the iconic classificatory schemes. While it is easier to transfer the hierarchical classificatory system into the physical form of a herbarium with its sheets, papers, files, and drawers, the zoo as a three-dimensional space poses serious problems in effectively accommodating that hierarchy. Despite not following the dogma of taxonomic order, zoological collections were crucial sites for resolving debates arising with each new zoological discovery. Zoos allowed for visual inspection and careful comparisons between specimens, available before the public and scientific eye. This is where the eye (as well as the nostril, the ear, and the finger) meets discourse.

The institutional importance of zoos and botanical gardens, underlined by Foucault, lies directly in the pragmatic function they played for the material practices of classifying species. They are practical exercises in taxidermic taxonomy. Zoological and botanical samples collected in the field were either dried, pressed, skinned, preserved, sketched, or brought alive along with habitat descriptions and other field notes. Accumulating these samples in the imperial metropolis allowed for careful comparisons, as well as for development of methods of standardization and governance that were exchangeable and translatable across different scientific networks and disciplines.²¹⁷ For this reason, species classifications as methodological tools within the genres of scientific treaties, handbooks, taxonomic keys, or popular guides typically contain detailed practical instructions on capturing, collecting, preserving, describing, measuring, and transporting specimens. Classifications also can be understood as an accumulation of these specimens, and, for that purpose, zoos and botanical gardens combined the function of the physical archive with that of laboratory. Access to live specimens allowed for finer distinctions between species and better calibration of the overall system. Jim Endersby makes a distinction

²¹⁷ See, Allen, “The Naturalist in Britain”; Latour, *Science in Action*; Star and Griesemer, “Institutional Ecology, ‘Translations’ and Boundary Objects.”

between colonial and metropolitan naturalists:

For the colonial naturalist, the main point of classifying was to know your local plants, to recognize the familiar, and – with a little luck – discover a new species. ... In addition to accurately cataloging the empire's natural resources, metropolitan naturalists were interested in the closely related project of comprehending the distribution of the world's plants, in part to facilitate their exploitation.²¹⁸

The Herculean task of cataloguing all living beings was critically dependent on the traffic in specimens, and therefore the totalizing force of the taxonomic system can be understood as a form of double domination: over nature and over the territories from which these natural wonders were extracted. In the context of colonial travels, Pratt recognizes that the publication of Linnaeus' *Systema Naturae* in 1735 had “a deep and lasting impact on ... the overall ways European citizenries made, and made sense of, their place on the planet.”²¹⁹ For her, natural history, and especially the standardization of its methods through the systematic classification model, became the navigational narrative for colonial expansion, along with its bureaucratic regimes of control and modern governance.²²⁰ Similarly, Lisbet Koerner shows that the Swedish “king of flowers” was himself deeply invested in making his science useful for the state governance and economic self-sufficiency of his motherland.²²¹ In this context, zoological and botanical collections served not only as spectacular displays of exotic wonders, but also as experimental grounds for the acclimatization of new species and their potential use in agriculture.

The eighteenth century saw an unprecedented growth in the number of known species. Colonial expeditions typically took enthusiastic naturalists on board, allowing them to accumulate specimens to expand classificatory inventories along with the territorial frontiers. The urge to detect previously undescribed species was in sync with colonial commerce and territorial domination. Upon arrival, each new discovery needed to be accommodated both within the taxonomic order and within the space of the zoo or other kinds of collections. However, it does not mean that this order was fixed and undisputable – some species prove to persistently challenge the sustained taxonomies, embodying the (dis)orderly character of taxidermic taxonomies.²²²

²¹⁸ Endersby, *Imperial Nature*, 150.

²¹⁹ Pratt, *Imperial Eyes*, 24.

²²⁰ *Ibid.*, 39.

²²¹ Koerner, *Linnaeus*.

²²² More about this issue in chapter 6.

For Foucault, the totalizing embrace of natural history's empiricity and its universalizing language becomes a fertile ground for the modern processes of identity formation:

Identity and what marks it are defined by the differences that remain. An animal or a plant is not what is indicated – or betrayed – by the stigma that is to be found imprinted upon it; it is what the others are not; it exists in itself only in so far as it is bounded by what is distinguishable from it. Method and system are simply two ways of defining identities by means of the general grid of differences.²²³

Within this “general grid of differences,” sexual difference, being the foundation of the dominant taxonomic system, assisted in solidifying reproductive heteronormativity as the defining feature of modern species identity, born out of science.

This prompts a number of questions: whose identities are being forged, and who (or what) is the material substrate of that process? In *History of Sexuality*, Foucault centers his analysis of the bourgeois self on the proliferation of discourses on sex in the nineteenth century, and specifically, situates this process at the heart of European empire. He describes technologies of the self as exercised upon such focal objects of scientific knowledge such as “the masturbating child,” “the hysterical woman,” and “the pervert.” However, as a number of postcolonial scholars have noted, specific distinctions within the discourse of sexuality were rooted in colonial classifications of plant, animal, and human colonized bodies.²²⁴ They show how bourgeois sexual and racial identities emergent in nineteenth-century Europe were in fact contingent upon colonial Others as primary objects of knowledge. Stemming from this development of Foucault's thought within the postcolonial framework, the zoo emerges as one of the crucial sites for the construction of the European self in relation to colonial Others, whose animal and animalized bodies are ordered according to the hierarchies of species, fusing sex and race. Sex became deeply inscribed into the classification system, not only through its provocatively erotic language, but also through the methods of labeling natural phenomena according to a sexual system. Epistemology and ontology cross-pollinated. However, sexual

²²³ Foucault, *The Order of Things*, 158.

²²⁴ See, Guha and Spivak, *Selected Subaltern Studies* especially the two concluding articles by Partha Chatterjee and David Arnold in the section V. “Developing Foucault;”; Vaughan, *Curing Their Ills*; Mitchell, *Colonising Egypt*; Ware, *Beyond the Pale*; Hyam, *Empire and Sexuality*; Stoler, “Sexual Affronts and Racial Frontiers”; Lavrin, *Sexuality and Marriage in Colonial Latin America*.

subjectivity as it is understood today started taking shape only in the nineteenth century with the rise of expert discourses of scientific sexology.

Sexual Taxonomies: Thinking through Deviance

In 1903, in the preface to the twelfth edition of his voluminous *Psychopathia Sexualis*, Richard von Krafft-Ebing asserts that this significantly enlarged catalogue of human sexual disorders was assembled with the aim of benefiting professional circles of physicians, forensics, and judges, and with a hope that it “will assist in removing erroneous ideas and superannuated laws.”²²⁵ At the same time, he recognizes that “its commercial success is the best proof that large numbers of unfortunate people find in its pages instruction and relief in the frequently enigmatical manifestations of sexual life,” bringing “solace and social elevation to its readers.”²²⁶ Despite this admitted popular interest in the biomedical study of sexual pathologies, its last edition still clung to a position as scientific gatekeeper, with an increased number of technical terms and more frequent use of Latin terminology. In this way, this classification of sexual deviations echoes the distinctive features of Linnaean taxonomy, namely, popular outreach and scientific nomenclature. Most importantly, making sex key for botanical and zoological classifications in the Linnaean sexual system allowed for easy translation into the classifications of humans that materialized in both racial and sexual taxonomies. Although both publications (*Systema Naturae* and *Psychopathia Sexualis*) were written (and re-written multiple times) with a scientific audience in mind, they became extremely popular among non-professionals, partly due to vivid erotic descriptions enticing readers.²²⁷

Krafft-Ebing, as one of the pioneering classifiers of sexual disorders and the forerunner of modern sexology, a nascent academic discipline within the rising field of psychiatry, adopted the acclaimed taxonomic methodology and technical language

²²⁵ Krafft-Ebing, *Psychopathia Sexualis*, iii.

²²⁶ Ibid.

²²⁷ The late nineteenth century saw an unprecedented growth in professional interest in sexual perversions within psychiatry and forensics. The works of such authors as Iwan Bloch, Albert Moll, Auguste Forel, Valentin Magnan, Arrigo Tamassia, Marc-Andre Raffalovich, Julien Chevalier, Benjamin Tarnowsky, Georges Saint-Paul, and Edward Carpenter (to name a few) were specifically focused on same-sex desire. Some of these early works by Karl Heinrich Ulrichs, Havelock Ellis, Magnus Hirschfeld, Károly Mária Kertbeny, and others bear an emancipatory character and constitute the bedrock of the early sexual reform movement. In this chapter, I focus on Krafft-Ebing’s work due to its wide impact in both medical and reformist circles. I decided to analyze the foundational *Psychopathia Sexualis* because of its encyclopedic scope and evidently taxonomic character.

of Linnaeus in order to gain recognition within medical sciences and to prove the scientific competence of clinical studies of sexuality, a topic some still found shameful.²²⁸ But apart from the common methodological approach and enduring professional struggles within the explosion of scientific knowledge production at the brink of modernity, what are the exact moments in which zoological and sexological taxonomies overlap? How are these peculiar contact zones between strange animals and perverse humans manifested in the display of live animals? In what ways does animality figure as biological evidence in the origin stories and beliefs about the intimate bond between sexuality and heredity championed by scientific cultures, increasingly inclined towards evolutionary theory? In this, part of the focus was on unpacking the notion of “disorder.”

Whereas Linnaean taxonomy laid the groundwork for sexuality becoming the distinctive characteristic of biological life (further developed in the Darwinian discourse on sexual selection), Krafft-Ebing’s sexual bestiary posited sexual feelings as the foundation of human social development, becoming, in his own words, “the root of all ethics, and no doubt of aestheticism and religion.”²²⁹ In the early twentieth century, this belief was firmly grounded in scientific thought, especially in disciplines such as anthropology. At the same time, human sexual desire started to be viewed beyond its biological function, conveying the modern ideal of romantic love. Krafft-Ebing writes: “Man puts himself at once on a level with the beast if he seeks to gratify lust alone, but he elevates his superior position when by curbing the animal desire he combines with the sexual functions ideas of morality, of the sublime, and the beautiful.”²³⁰ In this understanding, sexual drive as a natural instinct connected to lust and animalistic desire is located within the body, while sexuality as a broader phenomenon constitutes an amalgam of experiences, feelings, fantasies, dreams, habits, autobiographical self-reflection, and acts, all of which later fleshed out Krafft-Ebing’s case study material. According to Harry Oosterhuis, “foreshadowing Freud’s theory on the origins of culture, he postulated that the sexual drive itself contained the seeds of civilized life and that human civilization had in fact emerged from the realm

²²⁸ Bland and Doan, *Sexology Uncensored*, 2.

²²⁹ Krafft-Ebing, *Psychopathia Sexualis*, 2.

²³⁰ *Ibid.*, 1.

of brute instinct to which nature still consigned animals.”²³¹

At the same time, for Krafft-Ebing, the advance of civilization could easily produce corruptive vices manifested in degenerate human sexual development. Again, Morris reiterates this point in the mid-twentieth century – armed with sociobiological argumentation, he parallels the corruptive captivity of the zoo with that of the modern city, and features sexual pathologies as the focal points of his critique of civilizational development gone wrong. To trace the roots of this potent metaphor binding human and animal lives and placing sexuality as the ultimate sign of (dis)orderly degeneration, it is necessary to go back to the moral discourse on sexuality of the early century. Similarly to Morris, Krafft-Ebing specifically locates the source of moral contagion in the modern metropolis: “Large cities are hotbeds in which neuroses and low morality are bred, *vide* the history of Babylon, Nineveh, Rome and the mysteries of modern metropolitan life.”²³² Those modern mysteries include the emergent “deviant” subcultures, eagerly exploring erotic variety offered by consumer culture, loosened familial structures, and anonymity all combined in the new model of urban lifestyle. As I mention in chapter 1, in this very context and based on the swelling anxieties connected to urban growth, the zoological garden was prescribed as a healthy and natural alternative for the bewildering attractions of the modern metropolis, in stark contrast to views of later writers such as Morris. As such, the zoo was designed to function as a cure for “syphilization and civilization,” to use Krafft-Ebing’s oft-cited catchphrase, and thus, a space for moral regulation achieved through order. Given this context, his sexual taxonomy reveals the acute ambiguity of what sexual drive was supposed to signify in the modern world – the driving force of civilization and a potential for moral decline at the same time.

Taxonomization of human sexual behavior was focused particularly on “deviant” cases that exist outside of the procreative norm, seemingly divorcing medical explanation of sexuality from morality and religion. Poststructuralist historians point to the medicalization of sexual perversions in the nineteenth century as the key process in the construction of modern sexual identity, despite its deeply pathologizing character.²³³ Just as in the case of curious zoological specimens that

²³¹ Oosterhuis, *Stepchildren of Nature*, 68.

²³² Krafft-Ebing, *Psychopathia Sexualis*, 7.

²³³ Foucault, *The History of Sexuality*, 1990; Weeks, *Sexuality and Its Discontents*; Weeks, *Sex, Politics*

challenged taxonomic categorizations, it is the epistemology of the abnormal, deviant, and perverted that critically delimits and redraws ontological boundaries.

Of course, each “perversion” is always in a critical relation to the norm it deviates from. In zoological and botanical classifications, this norm often functions as a “type,” an ultimate point of reference to identify other specimens of the same species within systematics. The “type-specimen” was crucial for taxonomy both as an organizing concept and a material being because it allowed eliminating false discoveries that might be based on individual differences and peculiarities, thus, encompassing the tension between variation and speciation. According to historian of science Paul Farber, the “type-concept” has been used in at least three meanings in early-nineteenth-century natural history and functioned as a central organizing idea for pre-Darwinian zoology. The first is the *classification type-concept*, which “aided naturalists in their attempt to organize their material in a rational manner,”²³⁴ concerned with creating a taxonomic model. In contrast, the *collection type-concept* grew out of the comparison of individuals to that model.²³⁵ In this way, it was closest to the type-specimen concept, because it originated from the empirical base provided by botanical or zoological collections. Lastly, the *morphological type-concept* was concerned with setting up a morphological plan shared within a species or genus.²³⁶ In all three meanings the construction of the type critically depended on the availability of material specimens to measure, label, describe, dissect, and compare against each other, thus making the zoo vital for the taxonomic project of determining the species norm.²³⁷

In this quest for uncovering an order in the natural world, any deviation holds open the possibility for either becoming an obstacle or a chance for new discovery. For the early naturalists and taxonomist, the crucial task was to determine whether a given “abnormality” was of an individual or environmental character or if it was a quality shared within a larger population. As Farber notes, “although museum

and Society, 1981.

²³⁴ Farber, “The Type-Concept in Zoology during the First Half of the Nineteenth Century,” 95.

²³⁵ *Ibid.*, 97.

²³⁶ *Ibid.*, 100.

²³⁷ As Sofia Åkerberg notes in her study of the London Zoological Garden in the nineteenth century, live specimens gave certain advantage in the taxonomizing task. She writes: “the Gardens offered a rare opportunity to study animals more closely than in the wild and thus determine new species more accurately on the basis of a live animal. Birds and certain invertebrates often lost their original colour in mere hours after death.” Åkerberg, *Knowledge and Pleasure at Regent’s Park*, 175.

workers and field naturalists had observed a range of variation within populations, they also noted that variation appeared to radiate around a ‘type.’”²³⁸ The overwhelming increase of specimens in botanical and zoological collections revealed that some supposedly significant variations were either based on individual differences or were connected to sexual, seasonal, geographical, or age-specific variations within the same species. Precisely determining what constituted a truly significant variation, then, was vital for the definition of species and foundational for both Lamarckian and Darwinian evolutionary theories. It also established the status of a “meaningful” form of deviation – one that displays a pattern and in this way, becomes classifiable. This practice formed an epistemological and material foundation for sexological taxonomies of “abnormal” sexual behaviors as meaningfully classifiable phenomena, as well as for looking for their biological basis. Examining deviance to establish the norm became the primary mode of sexological taxonomizing and formed the essence of what I call (dis)order.

According to Stacy Alaimo, “thinking through deviation as both ideological and material, as both a form of critique and an ideal, may be less contradictory than it seems, if we consider deviation as a form of material/discursive agency of thoroughly embodied beings who are always inseparable from the environment.”²³⁹ Alaimo’s reconceptualization of deviation proves particularly useful in excavating fossilized scientific truths in the archaeology of knowledge about sexuality, especially due to its environmental scope and focus on rethinking agency. Although it would be quite easy to frame botanical, zoological, and sexual taxonomies as a disembodied methodology, or an abstract point of order, Alaimo’s materialist feminist standpoint dictates a much broader understanding of these classificatory schemes – one taking into account the “trans-corporeal” component of any attempt to set up a universal scientific order of things. Taxonomies, whether botanical, zoological, or sexological, depend on human and nonhuman bodies, binding them together as material substrates for epistemological schemes and ontological hierarchies. For Alaimo, “trans-corporeality, as descendant of Darwinism, insists that the human is always the very stuff of the messy, contingent, emergent mix of the material world.”²⁴⁰ Thus, the taxonomic technologies of the human body are modeled on nonhuman classifications with their

²³⁸ Farber, *Finding Order in Nature*, 64.

²³⁹ Alaimo, *Bodily Natures*, 139.

²⁴⁰ *Ibid.*, 11.

tangible practices of collecting, dividing, dissecting, measuring, and comparing bodies and specific bodily parts. These material practices are attuned to detecting deviations and establishing differences through negotiations within (dis)order. For Alaimo, “an openness to material agencies, including those of evolutionary forces, entails an openness not only to deviants that result but also to the wider sense that the world is ever-emergent.”²⁴¹ Her focus on deviation as a material/discursive agency builds on Ladelle McWhorter’s queer rereading of Foucault.²⁴²

McWhorter offers an insight into how the category of deviation or deviance is central to the Foucauldian theory of biopolitics and disciplinary power as the driving force for practices of “normalization.”²⁴³ She exposes what consequences it has for contemporary sexual politics. McWhorter, similarly to postcolonial re-workings of Foucault’s theory, significantly broadens the scope of its political consequences and situates these theories in a contemporary landscape. Importantly for my analysis, she considers deviance both in its biological and identitarian meanings. She writes:

Deviance – be it deviance in the sexual characteristics of human beings or in the morphological characteristics of pigeons – can help scientists understand how a given type of organism will develop under favorable conditions. ... Deviance tells us a lot about normality, much more than normality tells us about deviance. As sexuality came to be an epistemic object – a gradual occurrence through the first part of the nineteenth century – deviant sexualities came under close scrutiny.²⁴⁴

Studying patterns of deviance and classifying its measurable degrees is deeply rooted in the natural scientific methodology adopted by sexologists, or as she puts it: “There is no difference, only measurable deviance.”²⁴⁵

Degenerate Lovers and Nonhuman Others

By the second half of the nineteenth century, sexual deviance was not only labeled and classified within a matrix of pathological behaviors, but also gained

²⁴¹ Ibid., 143.

²⁴² McWhorter, *Bodies and Pleasures*.

²⁴³ McWhorter herself speaks from the standpoint of deviance. Her book includes an autobiographical engagement with Foucault’s theory, marked by her own experience of forced psychiatric institutionalization due to her queerness. Despite this painfully embodied consequence of becoming enfolded into sexual taxonomies, McWhorter is able to reimagine deviance as a source of generative difference: “It was deviation in development that produced this grove, this landscape, this living planet. What is good is that the world remain ever open to deviation.” Ibid., 164.

²⁴⁴ Ibid., 18.

²⁴⁵ Ibid., 156.

multiple diagnoses rooted in both biology and psychology. One of the most prominent explanatory models in psychiatry at the time was the theory of hereditary degeneration. Developed by French psychiatrist Benedict Auguste Morel in his *Traité des Dégénérescences* (1857) it stipulated that both innate and environmental factors could lead to the development of mental disorders, which could be further passed on to another generation.²⁴⁶ Drawing from the Lamarckian notion of the heritability of acquired characteristics, degeneration theory was centered on sexuality and naturalized facts about it, and as such had wide repercussions in the emergent discourses on racial hygiene and public health. According to Somerville, in sexological texts from that period, “the bodies of sexual degenerates (homosexuals and prostitutes) were analogous to criminals and ‘primitive’ races.”²⁴⁷ The latter were already heavily animalized in racial discourses. Observations of nonhuman animals in captivity formed an important point of reference for those claims, building on the zoo as experimental grounds fusing theories of biological inheritance with behavioral models.

Medical professionals and early sexologists widely adopted the idea that evolutionary advancement could also move backwards and lead to a state of devolution, unearthing latent traces of animalistic ancestral bisexuality or homosexuality in “degenerate” humans.²⁴⁸ The wild beast within could be awakened any time. However, this iteration of the evolutionary model, with its presumed continuity between humans and other animals, did not shake the hierarchical boundaries set up by earlier comparative studies in anatomy, which in their search for the apelike “missing link” wanted to find evidence for Western man’s superiority. In fact, it even reinforced racial and gendered hierarchies that still ranked humans according to their imagined proximity to nonhuman animals within this order. More so, the fear of “going ape” as a result of the allegedly corruptive aspects of modern civilization became even more tangible with the widespread acceptance of the possibility of degenerating into more “primitive” stages of evolution, due to the hereditary character of sexual disorders. Sexuality was central to these narratives precisely because of this assumed heritability of deviance – paradoxically, its innate character functioned as a double-edged argument for solidifying it as a naturalized

²⁴⁶ Morel, *Traité des dégénérescences*.

²⁴⁷ Somerville, “Race,” 202.

²⁴⁸ See, Pick, *Faces of Degeneration*.

hard-wired identity and at the same time for controlling it through eugenic practices. Controlling sexuality meant controlling the spread of degeneration and shaping the future of the species.

Krafft-Ebing's clinical case study materials reveal his indebtedness to Morel's theory: the recurring signs of "hereditary taint" in patients' family history, often indicated by bodily anomalies, served both as evidence of the degenerate character of sexual deviances and as their viable biomedical explanation.²⁴⁹ Krafft-Ebing identified "sexual inversion" and "contrary sexual feelings" as congenital abnormalities:

This defect of the natural laws must, from the anthropological and clinical standpoint, be considered as a manifestation of degeneration. In fact, in all cases of sexual inversion a taint of a hereditary character may be established. What causes produce this factor of taint and its activity is a question which cannot be well answered by science in its present stage.²⁵⁰

What hides behind the mysterious hereditary taint of the invert's newly gained and medically mediated identity? As Chauncey points out, the nineteenth-century model of sexual degeneracy, known as "sexual inversion," was understood a reversal of one's sexual role, and thus, along with myriad gender characteristics, had a broader meaning than the subsequent definition of "homosexuality," which denotes a "deviant" object of sexual desire.²⁵¹ Moreover, according to sexological studies, the incongruence of the invert's biological sex with their sexual role was expressed not only in the way they behaved, looked, and whom they desired, but was also to be found in their anatomy and physiognomy.

The case studies' descriptions in *Psychopathia Sexualis* not only enfold family history archives and a repertoire of typical activities each informant engaged in, but also often include a detailed physical examination of their secondary sexual characteristics. Consider the case of a twenty-six year-old woman, labeled "Homosexuality in Transition to Viraginity":

The physical and psychical secondary sexual characteristics were partly masculine, partly feminine. Her love for sport, smoking and drinking, her preference for clothes cut in the fashion of men, her lack of skill in and liking for female occupations, her love for the study of obtuse and philosophical subjects, her gait and carriage, severe features, deep voice, robust skeleton, powerful muscles and absence of adipose layers bore the stamp of the masculine character. The pelvis also (small hips), distantia spinarum 22cm., cristarum 26, trochanterum

²⁴⁹ See, Hurley, "Hereditary Taint and Cultural Contagion."

²⁵⁰ Krafft-Ebing, *Psychopathia Sexualis*, 349.

²⁵¹ Chauncey, "From Sexual Inversion To Homosexuality," 119.

31, approached the masculine figure. Vagina, uterus, ovaries normal, clitoris rather large. Mammae well developed, hair on mons veneris female.²⁵²

The clear focus on the patient's sexual organs echoes the longstanding tradition in comparative anatomy to rank people within the civilizational, developmental, and ultimately humanity spectrum according to characteristics of their sexual anatomy. Labia, hymen, uterus, ovaries, and especially the clitoris became the focal points for naturalists and anthropologists examining black female bodies. Georges Cuvier dissecting the body of Saartije Baartman looked for evidence proving her direct descent from the orangutan and believed to have found it in the appearance of her external genitalia (qua locus of sexual excess).²⁵³ What is the basis for this peculiar "comparison of a female of the 'lowest' human species with the highest ape,"²⁵⁴ as Sander Gilman asks in reference to Cuvier's medical speculation? Why would sexual anatomical features more than other body parts confirm human relatedness to nonhuman animals?

There are two formative aspects of this pattern, established within the tradition of scientific racism and later followed by early modern sexology, that can explain this fixation on female sexual organs: first, the reproductive function of female sexual anatomy, and second, the principle of sexual selection in nascent evolutionary theory becoming paradigmatic for natural sciences. Both of these aspects are intimately interlaced and find a perfect meeting point in eugenic discourses on the regulation of populations and concerns over "race suicide." The Darwinian model assumes that the key mechanism of evolution is the natural selection process, partly realized through sexual selection, which compels organisms to compete for sexual partners. In its original conceptualization, sexual selection is understood as the driving force of speciation, and is premised on the idea that with greater species variation, sexual dimorphism increases. The organization of the zoological display in the late nineteenth and early twentieth centuries was an important testing ground for natural scientists and aided in establishing this correlation. Zoological specimens at that time were typically arranged in a progressive manner, with sexual dimorphism in certain species highly accentuated – the contrasts between the doe's gentle appearance and bull's elaborate antlers in ungulates, or the proverbial peacock's tail contrasted with

²⁵² Krafft-Ebing, *Psychopathia Sexualis*, 419.

²⁵³ Traub, "The Psychomorphology of the Clitoris."

²⁵⁴ Gilman, "Black Bodies, White Bodies," 213.

its hen's grey plumage – were part of the zoological spectacle. The focus on sexual dimorphism was also rooted in earlier classificatory debates and practices that necessitated careful attention to sexual difference that could be easily mistaken for species differentiation. Also, for the sake of the sustainability of the collection, it was advised to keep at least one male and one female of each species as a reproductive unit.

In her project of recuperating Darwinian theory for feminist philosophy, Elisabeth Grosz points out that sexual selection is irreducible to natural selection, and in fact, “sexual selection may be understood as the queering of natural selection, that is the rendering of any biological norms, ideals of fitness, strange, incalculable, excessive.”²⁵⁵ However, this complex process is often reduced to a schematic dependency: the greater evolutionary advancement of a given species, the more visibly pronounced its sexual differentiation. Early proponents of social Darwinism, as well as more contemporary adherents of sociobiology and evolutionary psychology, have used this simplified formula to tie sexual difference to reproduction, and in this way essentialize bodily sexual characteristics as markers of evolutionary progress. In this sense, by searching for ambiguous traits in the sexual anatomy of lesbians, prostitutes, and black women, anatomists and sexologists constructed them as inherently anomalous beings, whose bodies bear the stigmata of degeneration, in order to prove that they function as disturbances in evolutionary development. In other words, the evolutionary order was being secured through instances of its disorder.

Stemming from this kind of evolutionary model, the theory of sexual inversion is based on the notion of sex reversal. Sexologists often characterized it as psychical and physical hermaphroditism, which, drawing on zoological studies, was perceived as a more primitive stage of development within the natural hierarchical order. For instance, when referring to the work of American psychologist James Kiernan, Krafft-Ebing wrote that he “assumes in trying to subordinate sexual inversion to the category of hermaphroditism that in individuals thus affected retrogression into the earlier hermaphroditic forms of the animal kingdom may take place at least functionally.”²⁵⁶ Following the works of other sexologists and physicians, Krafft-Ebing believed that

²⁵⁵ Grosz, *Becoming Undone*, 2011, 132.

²⁵⁶ Krafft-Ebing, *Psychopathia Sexualis*, 344.

“the psycho-physical sexual difference runs parallel with the high level of the evolving process.”²⁵⁷ Based on the widespread idea that ontogeny (individual development from embryo to adult organism) repeats phylogeny (the stages of evolutionary development of its remote ancestors), any form of hermaphroditism was perceived as a regression to a more primitive stage of evolutionary development. Stemming from this model, the phylogenetic tree was established as a visual point of reference in a taxonomic practice.

In his assessment of how various authors have approached the dilemma of classifying masculine females and feminine males, Krafft-Ebing again focuses on the genitals as the primary markers of sexual difference:

In the same manner in which the *processus vermiformis* in the intestinal tube points to former stages of organisation, so may also be found in the sexual apparatus—in the male as well as in the female—residua, which point to the original onto- and phylogenetic bisexuality, not to speak of hermaphrodisic malformations, which may be looked upon merely as partial excesses of development, or disturbances in the formation of the sexual organisation, and especially of the *external* genitals.²⁵⁸

The uncertainty palpable between categorizing sexual ambiguity as developmental “excess” or “disturbance” in this formulation leaves some room for interpretation. Grosz suggests that “homosexuality, like racial diversity or difference, ... is one of the many excesses that sexual selection introduces to life, like music, art, and language, excesses that make life more enjoyable, more intense, more noticeable and pleasurable than it would be otherwise.”²⁵⁹ At the first glance, this argument seems to be in sync with Krafft-Ebing’s understanding of sexuality as the root for all ethics and aesthetics. However, his assertion was key to proving the degenerative character of sexual inversion, rather than being utilized for celebrating any affirmative biodiversity of sexual excess. Both “excess” and “disturbance” critically rely on the idea of a natural norm, from which subjects deviate towards surplus or lack. This encapsulates the ambiguity of (dis)order, always kept in a critical tension between the norm and its outside. Nonetheless, it is the reliance on zoological examples and data, running throughout Krafft-Ebing’s theory of sexual differentiation, that is of special interest for me here. These zoological references steered interpretations of sexual ambiguity towards animalization, coupled with racialization.

²⁵⁷ Ibid.

²⁵⁸ Ibid., 345.

²⁵⁹ Grosz, *Becoming Undone*, 2011, 131.

According to Somerville, “sexologists writing in the late nineteenth and early twentieth century inherited this tendency to racialize perceived sexual ambiguity, but they used new framework to interpret its meaning.”²⁶⁰ With a set of methodologies borrowed from comparative anatomy, the invert as the new study object was already a racialized figure. However, considering my earlier delineation of sexuality becoming the main thread running through taxonomies of plant and animal life, I would like to turn attention to the strong undercurrent of animalization that brings together the racialized and gendered bodies under scientific scrutiny. I argue that sexologists were equipped not only with measuring instruments, like the ones anthropologists used to examine racialized bodies in zoological displays, but also with methodologies coming from natural history that allowed them to visually and conceptually rank deviant bodies and inscribe them into natural order. In this sense, nonhuman embodiment serves not only a point of reference, but also as a naturalizing circumstance that aids in proving the hereditary, and more specifically, the degenerate character of sexual disorders. For example, in his section on “Anthropological Facts,” Krafft-Ebing attempts to verify the biological basis of sexual inversion by referring to the pathomorphology of sexual glands:

Analogous experiences are made in cases in which the sexual glands were lost long after matured puberty. For instance, bearded women are frequently found in the *post mortem*, minus ovaries (Diet, de med. et de chirurg. prat, art. “ovario”). In a similar manner pheasant hens are found with degenerated ovaries, but with the plumage and voice of the male. (Discuss, de la société zoologique do Londres).²⁶¹

In this short excerpt, bearded women and female pheasants with male plumage share an unlikely interspecies alliance within the modern sexological freak show, on the dissection table, and in the taxonomic table.

It is also important to note that whereas the pioneering sexologists usually discussed nonhuman animal embodiment in the context of comparative anatomy, the second generation of sex researchers included data on homosexual behavior among nonhuman animals in their taxonomies. Magnus Hirschfeld, a German physician and sexologist and the founder of the Scientific-Humanitarian Committee in Berlin, devotes a whole chapter of *The Homosexuality of Men and Women* (1914) to

²⁶⁰ Somerville, *Queering the Color Line*, 27.

²⁶¹ Krafft-Ebing, *Psychopathia Sexualis*, 46.

homosexuality in the animal kingdom.²⁶² Aware of the limited research material available at that time, Hirschfeld gives a brief overview of the discussion within sexology and zoology on the occurrences of same-sex behavior and physical hermaphroditism in nonhuman animals. He starts by unveiling the assumed absence of homosexuality among animals as the prerequisite for medieval sodomy laws, later moving to a collection of cases proving animal homosexuality scattered in early natural history writings, zoological journals from entomology to ornithology, observations by zoo staff, and popular press articles on zoological curiosities.²⁶³

Hirschfeld classifies three groups of homosexual tendencies in nonhuman animals based on these varied materials: “(1) Animals that pair up with individuals of the same sex out of necessity or by mistake; (2) those in whose case the decision is undecided whether or not is can also have to do with inclination, and (3) those in whose case you have to assume it is a pronounced same-sex orientation based on accompanying circumstances.”²⁶⁴ He treats observations of domestic and captive animals with gravity, seriously considering their inborn homosexual tendency, even though they fall under the third category. This leads him conclude that homosexuality is part of the natural evolutionary development, rather than its aberration.²⁶⁵

Similarly, in the second volume of *Studies in the Psychology of Sex* (1927), Havelock Ellis, English physician and researcher of human sexuality, also delineates sexual inversion from nonhuman animals, through what he calls “lower races,” culminating with cases from Western societies. In this way, he creates an order in writing a genealogy of disorder. Significantly, both in animal cases and his overview of homosexuality among “primitive” humans he refers to sexual feelings in terms of primary instinct. This intentional broadening of evidentiary material beyond studies of

²⁶² Hirschfeld, *The Homosexuality of Men and Women*, 717–24.

²⁶³ The overlap between Hirschfeld’s sources and my own case study materials (analyzed in the second part of this dissertation) is not coincidental. The ontological presence of queer animals in twenty-first-century discourses can be traced to professional biological journals (now expanded to new branches of science like genetics, sociobiology, evolutionary psychology, etc.), zoo observations, and tabloid zoo scandals about the nonhuman “love that dare not speak its name.” Strengthening this tendency, Hirschfeld’s accounts on zoo love stories also follow a similar narrative that most prominent cases of queer zoo romance stories presently employ. The storyline featuring a loyal pair of animal lovers, unmasked to be of the same sex with bonds so strong they stay together until “death tears them apart,” seems to be equally applicable to Hirschfeld’s depictions of ducks and swans observed in the Berlin Zoo in the early twentieth century and gay penguin love sagas of the current times. Hirschfeld writes: “The observed genuine homosexual relationships between the different ducks are distinguished by their stability; the friends stay together for the summer and winter, often until death.” *Ibid.*, 722.

²⁶⁴ *Ibid.*, 719.

²⁶⁵ *Ibid.*, 722–723.

asylum patients and criminals is aimed at demonstrating that homosexuality is an innate quality, holding a universal character rather than presenting an evolutionary error. Ellis starts this origin story of sexual inversion, spanning across species, human races, time, and space from a statement that “among animals in a domesticated or confined state it is easy to find evidence of homosexual attraction, due merely to the absence of the other sex.”²⁶⁶ In a short passage devoted to nonhuman animals, he mostly describes cases of homosexuality among domestic and zoo animals in terms of occasional play or deprivation, with the “normal” state of reproductive heterosexuality being easily restored when the opposite sex partner reappears as an option. Ellis also cites several cases of same-sex behavior observed in German zoological gardens:

Dr. Seitz, Director of the Frankfurt Zoölogical Garden, gave Moll a record of his own careful observations of homosexual phenomena among the males and females of various animals confined in the Garden (*Antelope cervicapra*, *Bos Indicus*, *Capra hircus*, *Ovis steatopyga*). In all such cases we are not concerned with sexual inversion, but merely with the accidental turning of the sexual instinct into an abnormal channel, the instinct being called out by an approximate substitute, or even by diffused emotional excitement, in the absence of the normal object.²⁶⁷

In these descriptions, Ellis seems to rely on the definition of homosexuality as a deviant object of sexual desire, rather than through sexual inversion theory understood as gender role reversal (as employed earlier by Krafft-Ebing). The curious cases of temporary homosexuality in animals might also dwell on the distinction between “true” inversion of an unequivocally hereditary character, and “pseudo” inversion that could sway back to heterosexuality.

Another notable figure, endorsed by both Hirschfeld and Ellis for combing anthropological and zoological data to prove that homosexuality is a cross-cultural and cross-species phenomenon, is Ferdinand Karsch-Haack, a German entomologist and ethnologist.²⁶⁸ Although he is mostly known for his ethno-historical treatises on same-sex love, his work was also one of the precursors to the scientific study of homosexuality in the animal kingdom. This famous arachnologist and the curator of the Zoological Museum of the Friedrich-Wilhelm University in Berlin was directly

²⁶⁶ Ellis, *Studies in the Psychology of Sex, Volume 2 Sexual Inversion*, 2:6.

²⁶⁷ *Ibid.*, 2:7.

²⁶⁸ Aldrich and Wotherspoon, “Karsch-Haack, Ferdinand.”

involved in the sexual reform movement.²⁶⁹ His most prominent text, “Pederasty and Tribadomy among Animals based on Literature” (1899), was published in the *Yearbook for Sexual Intermediaries (Jahrbuch für sexuelle Zwischenstufen)*, edited by Hirschfeld, and could be considered the first zoological study of same-sex sexual behavior in nonhuman animals.²⁷⁰

Interestingly, both Ellis and Hirschfeld point their readers eager for further research on animal homosexual behavior to the iconic *Brehms Tierleben (Brehm’s Life of Animals)* – an elaborately illustrated ten volume zoological encyclopedia by German zoologist, Alfred Edmund Brehm. Hirschfeld lists sixty-nine examples of same-sex intimacy to be found on the pages of Brehm’s *Tierleben*: from mammals and birds; through reptiles, amphibians, and fish; to insects, worms, mollusks, and sponges.²⁷¹ This popular publication, based on travelogues and observations from a number of European zoos, became especially well acclaimed among the nineteenth-century bourgeoisie as “a complete natural history for popular home instruction and for the use of schools.”²⁷² The fact that strictly sexological studies refer to a popular-scientific handbook of natural history is another important trope in redrawing the genealogy of sexuality from a larger-than-human perspective. Interest in wildlife visualizations (in form of engravings such as the famous ones in *Brehm’s Tierleben*, and later photographs and films) was primarily connected to the zoo as the institution popularizing natural history.

Whereas strong ties between anthropology and sexology are quite well evidenced, the sexological use of zoological data is much more nuanced and inconspicuous. Nevertheless, it is in many ways foundational. Consider, for example, that Ellis wrote the preface to Bronisław Malinowski’s *The Sexual Life of Savages in*

²⁶⁹ From the above examples of Ellis’ and Hirschfeld’s engagement with zoological data, it is becoming clear that those sexologists who looked for evidence for the inborn and natural character of homosexuality in nonhuman sexual diversity (mostly focusing on behavioral traits, rather than anatomical features) were usually actively involved in the emancipatory movement. Hirschfeld’s leading role with the sexual reform movement in the twentieth-century Europe is emblematic. For his biography see: Wolff, *Magnus Hirschfeld*; Mancini, *Magnus Hirschfeld and the Quest for Sexual Freedom*. Early activists-scientists referenced nonhuman animal behavior to tell the story of homosexuality – as a perennial and natural characteristic of the human as a species – across their disciplinary boundaries. In this sense, queer nonhuman animals serve as tools in the practice of disenchanting same-sex love from its pathologized medical and psychiatric conceptualizations, and at the same time, allow “the homosexual” to fully emerge as a species.

²⁷⁰ Karsch, “Päderastie und Tribadie bei den Tieren.”

²⁷¹ Hirschfeld, *The Homosexuality of Men and Women*, 723.

²⁷² Brehm, *Brehms Thierleben*.

North Western Melanesia, an influential ethnographic study. Ellis starts his preface with the following words: “The sexual life of savages has long awaited its natural historian.”²⁷³ The lineage of the ethnologist has been traced to a natural historian progenitor, crucially linking studies of sexual habits of non-European Others with zoological research of organisms in their environments, research that relied heavily on collecting specimens for display. And at the institutional level, the affiliation between sexology, ethnology, and zoology was tangible, especially through spatial proximity. The world famous hub for sexological research, the Institute for Sexology (*Institut für Sexualwissenschaft*), had one of its five research departments dedicated to sexual ethnology,²⁷⁴ while its premises were located in Berlin’s Tiergarten (*Animal Garden*) – one of the city’s largest parks and one that accommodated the Berlin Zoological Garden. The incestuous interconnections between these three fields of study – namely sexology, zoology, and anthropology – are far from innocent given that the nexus of species, sex, gender, and race is realized via their data collection, analyzes, methods, and interventions into the worldly becomings of these categories as tangible material-semiotic entities. Encompassing the sexual lives of human and nonhuman animals this inter-disciplinary connection matters because it helped to solidify and naturalize the classificatory scheme that became fleshed out with anthropological, zoological, and sexological data.

What is Species?

The idea that nature is capable of producing monsters was not a novelty in the nineteenth century, and in fact, natural history, with its elaborate techniques of physically and conceptually capturing, preserving, classifying, and displaying bestial creatures, paved the way for emergent scientific disciplines to embrace monstrosity in an organized and standardized manner. As a consequence, properly labeled, examined, and classified monsters become normalized as naturally occurring phenomena. This method helped to mark out norms for animals, people, and society. Oosterhuis notes that in Krafft-Ebing’s inventory of sexual abnormalities, “perversions did not form a wholly distinct class, an isolated group of monstrous phenomena, but they tended to be considered merely as variations within a range of

²⁷³ Ellis, “Preface,” vii.

²⁷⁴ See, Herrn, “Vom Traum Zum Trauma. Das Institut Für Sexualwissenschaft.”

natural possibilities.”²⁷⁵ During his famous lecture in Vienna on the development of morality, Krafft-Ebing expressed this exact tendency to tame the unruly monstrosity through his definition of sexual deviancy:

Science shows that such moral monsters are stepchildren of nature, unfortunate creatures, against whom society has to protect itself, to be sure, but who should merely be rendered harmless and who should not be made to suffer for their social incapacity and their sexuality, for which they cannot be held responsible.²⁷⁶

Just as the fascination with “freaks of nature” manifested in curiosity cabinets slowly transformed into the professed naturalists’ hunt for the “type specimen” – a typical representative of a given species – sinful perverts committing “crimes against nature” were recuperated as “stepchildren of nature” by the science of sexology. This phrase, famously used by Krafft-Ebing, was aimed at distinguishing between the immoral perversity of criminals and sexual offenders and the disorder of homosexuality, a form of disease for which its unfortunate bearers should not be held responsible.²⁷⁷ In this shift from sin to sickness, the metaphor of “stepchildren of nature” categorizes perverts as simultaneously natural and unnatural. They are (un)naturally (dis)ordered.

These careful operations of domesticating monstrosity and embracing it as part of the natural world form an important trope in outlining and negotiating the boundaries of modern sexualities. Foucault asserts that:

on the basis of the power of the continuum held by nature, the monster ensures the emergence of difference. This difference is still without law and without any well-defined structure; the monster is the root-stock of specification, but it is only a sub-species itself in the stubbornly slow stream of history.²⁷⁸

Just as peculiar animal monstrosities became normalized when they were nested in their respective species categories, the homosexual became another specimen in the human taxonomy of sexual disorders and, as suggested by Foucault, as such became a new species in the sexual bestiary – an especially powerful species, which, as a properly measured deviant, serves as a yardstick for the norm. What does *species*, this capacious category basic for classificatory order, hide inside its bowels?

Species can be regarded as a fundamental unit for the zoo – one goes to the

²⁷⁵ Oosterhuis, *Stepchildren of Nature*, 65.

²⁷⁶ Krafft-Ebing (1892) Ueber “Gesittung.” Volkstumliche Vortrage 14. Vienna: Volksbildungsverein Wien und Umgeboung, cited after: *Ibid.*, 95–96.

²⁷⁷ *Ibid.*

²⁷⁸ Foucault, *The Order of Things*, 171.

zoo to observe species. Any individual animal in the zoo display becomes representative of its species: a tiger, a gorilla, a gecko, a penguin. Conventionally, species is understood as the basic organizing rank for taxonomies, and as such it aids their taxidermic obsession through order and proper labels. Nevertheless, Haraway notes that *species* is also a promiscuous and unlawful word, which, indebted to its Latin origin *specere*, activates visual registers and at the same time holds a fleshy presence in the histories of racism. When she declares that “*species* reeks of race and sex,”²⁷⁹ Haraway points to the fused nature of reproduction with the production of racial difference in biological discourses. The biological definition of species is centered on sexual reproduction – the ability to interbreed and produce fertile offspring is what makes two individuals the same species. Stemming from endless debates in natural history and evolutionary theory on the proper categorization of every newly discovered creature, the difference between speciation and variation, and species belonging of the colonized, noncitizens and enslaved peoples, this requirement not only privileges sexual reproduction over other forms of producing new individuals, but also positions reproductive sexuality as the prerequisite for species survival.

Following this logic, the “queer species” appears to be an intrinsic impossibility. Whereas the reproductive principle forms the core of what species is understood to be in biological sciences, it also stands as one of the main obstacles for something like a “queer species” becoming a “rightful” stepchild of nature. Yet, queerness holds a complicated affinity to this basic organizational rank of life, and as a bastard category it still appears and reappears in the knotted nonhuman and human ecologies. As David Halperin puts it:

Queer is by definition whatever is at odds with the normal, the legitimate, the dominant. There is nothing in particular to which it necessarily refers. It is an identity without an essence. ... Queer, in any case, does not designate a class of already objectified pathologies or perversions; rather it describes a horizon of possibility whose precise extent and heterogeneous scope cannot in principle be delimited in advance.²⁸⁰

If queerness is by default uncontainable and resists any taxonomy, it belongs to the rebellious, deviant, illegitimate, and often unwanted excess that seems to escape the species categorization. However, queerness cannot escape discourse and power

²⁷⁹ Haraway, *When Species Meet*, 2008, 18.

²⁸⁰ Halperin, *Saint Foucault*, 62.

categorizations. Rather, through the notion of (dis)order, I show how queer species are caught in the inherent tension between the norm and resistance to it.

The zoo is not only a site where the overwhelming variety of creatures is properly ordered, but it is also equipped with a machinery for translating the universe full of marvelous exotic beasts into a manageable species inventory. Whereas individual animals on display are there as representatives of their species, spatial arrangement is dictated by an imagined order of life and species groupings. At the same time, the zoo contains the less representable history of how species categorization fueled the ontological splitting of the human subject, and made it ripe for a violent usage. As Cary Wolfe argues, “the humanist discourse of species will always be available for use by some humans against other humans as well, to countenance violence against the social other of whatever species – or gender, or race, or class, or sexual difference.”²⁸¹ This humanist species discourse is key for the zoo. It is key for its order, as well as for its own institutional survival. Species as a zoo-dwelling category is both fecund and lethal at the same time. It is marked by the regimes of life and death. Most significantly, the shift towards the category of the *endangered* species, as the main alibi for modern zoos, renders palpable the logics of taxidermic taxonomies that underwrite conservationist and environmental discourses. The reproduction of life is critically coupled with extinction as the major concern for zoos.

²⁸¹ Wolfe, *Animal Rites*, 8.

Chapter 3. Temporality

Without a living subject, there can be no time.
– Jakob Johann von Uexkül “A Foray into the
Worlds of Animals and Humans”

“Time is running out for tigers” – reads one of the titles at an informational placard in the Toronto Zoo. This peculiar formulation taken out of its context might suggest that some particular tigers at the zoo have an important task to perform and the deadline for that duty is approaching. It might also implicate these and other tigers belonging to the same species as ephemeral entities whose days are numbered. In fact, both of these hasty interpretations are accurate. The board is part of the zoo’s educational technology and introduces the Reproductive Physiology Research Program run in an effort to spare endangered species from extinction. In this case, rare Sumatran tigers exhibited in the zoo may be extinct within the next ten years in the wild, and therefore their zoo compatriots indeed, do have a special task to fulfill – they are expected to produce offspring for their own species’ survival. According to the board, with the help of a team of specialists and their biotechnological tools the whole species might be kept alive. Activities of the Reproductive Physiology Research Program in the Toronto Zoo are described as “a combined dating service and fertility clinic for wild animals,” and include monitoring hormone levels and hormonal therapy for females, and collecting sperm from males to store it in the “frozen zoo” for future use in wildlife conservation world-wide. The key role played by reproducing species into the future in the conservation mission of contemporary zoos, through the focus on fertility, inevitably positions any non-reproductive sexual behavior as either an insignificant glitch, or an obstacle to overcome in the efforts of saving endangered species from extinction.

In the era of mass extinctions, the zoo is a mnemonic device²⁸² tuned to many different and overlapping modes of time: slow time of evolutionary changes and quick time of capitalist consumption, leisure time of zoogoers and “working hours” of the zoo-dwellers, sacred time of transcendental contact with nature and secular time of mass entertainment, linear time of industrial modernity and cyclical time of animal

²⁸² Cornelius Holtorf writes extensively on zoos as places of remembrance in the context of heritage studies and archeology. See, Holtorf, “Zoos as Heritage”; Holtorf, “Material Animals”; Holtorf, “The Zoo as a Realm of Memory.”

day/night and reproductive rhythms, desperate time of frantic human efforts to respond to species mass extinction and reflective time of grieving this loss. Furthermore, the zoo holds the genetic memory of embodied species categories and the cultural memory of environmental and conservationist practices. Both of these forms of remembering and all these forms of temporality are predicated upon reproduction. Although practical techniques of reproducing species into the future have changed throughout the zoo's long history – from studbooks and fertility charts, databases and Species Survival Plans, to cloning and frozen zoos, – animal reproduction remains key in ensuring both species and institutional survival in the gardens. By linking temporality and reproduction, I am referring not only to the material reproduction of animal life through breeding, but also to the reproduction of social orders that constitute the backdrop against which subjectivities of zoogoers are formed in the zoo.

Stemming from these observations and reflections, the complex relationships between the temporal dimension of sexuality and the chronopolitics of the zoo are the main focus of this chapter. The rationalized time of industrial modernity puts the assembly line in motion, dictates the pace of living through labor schedules, and carves out the freedom of leisure time. In this context I wonder: what role does capitalist acceleration and its time arrangement regimes play in the zoo? More importantly, how do these operations fold human and nonhuman subjects into temporalized patterns of normativity and belonging? If contemporary zoos with their new mission to breed endangered species are bound to what Lee Edelman calls “reproductive futurism,”²⁸³ what kinds of temporalities are invoked by queer animals? Should they be treated as castaways out-of-synch with the repro-sexual routine, as ephemeral and stuttering glitches in the regular flow of life, as anachronistic evolutionary dead-ends, or rather as embodiments of progressive proliferation of sexual identities? Can these queer subjectivities challenge the hegemonic conceptions of time as linear, absolute, and progressive? In this chapter, I first map out the dominant temporal orders of seemingly linear kinship structures, accumulative modes of time, and repro-normative cycles championed by the conservation-oriented institution of the zoo. I do so in order to track the undercurrent rhythms of perverse pauses, stalling, non-sequential, and time-warping lost moments of unnatural history.

²⁸³ Edelman, *No Future*.

Caught in the dialectic between the sacred timelessness in the Enlightenment-based grand narrative of Nature and the inevitable movement forward of the arrow of time rushed by capitalist productivity and evolutionary progress, the zoo offers itself as a potent site for analyzing the temporalized aspects of sexual, gendered, and racial subjectivities under construction in this time-space constellation.

Drawing from these questions and meditations, I am interested in investigating the *chronobiopolitics* of the zoo. This term, coined by Dana Luciano in her work on grief and mourning cultures, provides a temporal dimension to the biopolitical analytical framework of modern regulation of human bodies as spatiotemporal apparatuses to maintain a particular social hierarchy. Luciano defines chronobiopolitics as “the sexual arrangement of the time of life,”²⁸⁴ placing grief at the center of her conceptualization of sexuality as the pivot of the biopolitical arrangement of bodies according to numerous overlapping temporalities. Chronobiopolitics also deploys sexuality in a wide understanding as a spatiotemporal phenomenon pervading practices, behaviors, and materialities not “obviously” sex-related. With this concept I wonder what are the implications of chronobiopolitics practiced in the zoo for the species survival and proliferation strategies bound to temporal schemes of life and death? Luciano’s focus on the embodied chronology of nineteenth-century Western grieving cultures (from consolation literature, such as mourner’s handbooks and printed sermons, to notional memorialization, such as monuments and eulogies) expands the Foucauldian analysis of modernity into new territories of sexed and raced biopolitical control. My analysis builds on this approach to further extend it into the entanglement of human and nonhuman histories of sexuality within the framework of *taxidermic taxonomies*. Already for Foucault the idea of taxonomic order presents itself a strictly temporal phenomenon:

All the creatures that taxonomy has arranged in an uninterrupted simultaneity are then subjected to time. Not in the sense that the temporal series would give rise to a multiplicity of species that a horizontally oriented eye could then arrange according to the requirements of a classifying grid, but in the sense that all the points of the taxonomy are affected by a temporal index, with the result that ‘evolution’ is nothing more than the interdependent and general displacement of the whole scale from the first of its elements to the last.²⁸⁵

The taxonomic table and its indebtedness to the evolutionary logic of developmental progress is just one way in which time has been spatialized (and space temporalized)

²⁸⁴ Luciano, *Arranging Grief*, 9.

²⁸⁵ Foucault, *The Order of Things*, 164–65.

within the universal history of modernity. At first glance the zoo serves as an archive embracing the diversity of animal life, neatly organized according to classificatory schemes implying a linear progression. The idea of accumulating time is embodied in the collection, and as such underwrites the visions of progress, origins, and modes of advancing history. In this way the zoological space-time entanglement, rooted in the disciplinary tradition of natural history, gains a political dimension. At the same time, with its contemporary focus on anti-extinction work the zoo inscribes into affective temporal registers of remembrance. A visit to the zoo can leave a hopeful spectator with a corrosive feeling of longing, loss, and melancholia.

Display and Its Time-Spaces

It is almost a truism that the zoo is a specifically modernist phenomenon and functions as an undeniable aftermath of the intertwined processes of modernity, like the Industrial Revolution, the emergence of scientific culture, and colonial expansion.²⁸⁶ When discussing this institution in relation to temporality, tremendous changes brought by the shift towards capitalist mode of production and the free-labor economy not only conceived of the zoo in its current form thanks to the accumulation of financial and material resources, but also made it possible as a space for exercising the newly acquired rationalized leisure time. It has been widely argued that when it comes to space arrangement and regimes of visibility, the zoo borrows from such Panoptical structures as the prison or the department store.²⁸⁷ However, in the secularized age of modernity with its novel labor regimes, the temporal organization of a freshly segmented society significantly impacted the zoo, which was largely dependent on entrance fees, and thus, on the availability of working class visitors. Colonial expansion not only structured the spatiality of zoological collections through stocking zoos with specimens from newly acquired territories, but also impacted the temporal regimes of unfolding the story of Nature and civilizational advancement.

In her discussion of photography as a surveillance technology central to the capitalist and imperialist commodity culture, McClintock links it to “other panoptic Victorian phenomena – the exhibition, the museum, the zoo, the gallery, the circus – all of which involve the fetishistic principle of collection and display and the figure of

²⁸⁶ Berger, *About Looking*; Wirtz, “Zoo City”; Baratay and Hardouin-Fugier, *Zoo*; Hanson, *Animal Attractions*; Ritvo, *Noble Cows and Hybrid Zebras*.

²⁸⁷ Westley and Vredenburg, “Prison or Ark?”; Acampora, “Zoos and Eyes”; Braverman, “Looking at Zoos”; Braverman, “Zooveillance”; Montford, “Dehumanized Denizens, Displayed Animals.”

panoramic time as commodity spectacle.”²⁸⁸ This “panoramic time” seems to be a strictly visual and spatialized phenomenon. As such, panoramic time is realized through different forms of display. The painted panorama provided a vantage point for an all-encompassing overview that also positioned its spectators historically. For example, the 1829 guide to London’s Regent’s Park marvels at the panoramic view of the city exhibited at the Colosseum: “... overlooking the merits of the town itself, and the world of streets and buildings – the representation of the environs is delightfully picturesque, and the distances are admirably executed; while the whole forms an assemblage of grandeur, unparalleled in art, as the reality is in the history of mankind.”²⁸⁹

The same guide invites visitors to another novelty exhibition in Regent’s Park: the Daugerre’s Diaroma brought to London from Paris in 1823.²⁹⁰ This popular entertainment and early precursor to photography and film added even more illusionary depth into the panoramic view, achieving this through a theatrical experience owed to multiple movable painted landscape panels and skillfully managed lighting. The idea of an all-embracing view and a theatrical reenactment was later adapted in zoological exhibitions, when in the early twentieth century Carl Hagenbeck introduced his zoological panorama designed to give a snapshot view of a wildlife scene. This panoramic effect was available in the London Zoo from 1910 when the Mapping Terraces, already mentioned in chapter 1, were opened to the public:

[T]hese are a series of raised platforms at the west end of the Gardens, rising to a mountainous peaks on which goats perch themselves against the evening sky. At the foot is a pool for flamingoes, and between these extremities are enclosures where comic and grotesque bears seem to spend their whole lives in an erect posture. Intersecting paths give a view of these animals such as has not previously been enjoyed, while the conditions must be more pleasing to the inmates than heretofore.²⁹¹

The way in which the visual plains unfold in front of the viewer makes it clear that Hagenbeck’s panorama patented in 1896 drew both from the painted panorama and the Natural History Museum’s habitat diorama. All of these interconnected forms of exhibition are premised on a specific kind of temporality, which McClintock calls the *panoramic time*. It is the time that unrolls a horizontal continuous scene, providing a

²⁸⁸ McClintock, *Imperial Leather*, 123.

²⁸⁹ Limbird, *A Picturesque Guide to the Regent’s Park*, 33.

²⁹⁰ Åkerberg, *Knowledge and Pleasure at Regent’s Park*, 122.

²⁹¹ Lucas, *More Wanderings in London* (1916), 294.

comprehensive overview of a linear story of genealogy, progress, evolution, conquest, pedigree, or development, at a glance. The zoological panorama allows for freezing these processes in one frame. McClintock argues that “time became a geography of social power, a map from which to read a global allegory of ‘natural’ social difference.”²⁹² The way she relates time to spatiality in the metaphor of the map underscores the political power of the progressivist conceptualization of time as an all-encompassing view, ranging from the past to the future. This kind of time is imagined as steady, absolute, and measurable.

Along with the museum as a repository of compulsively collected static specimens, the zoo serves as an exemplary time-space display of living artifacts embodying measurable units in the fantasy of linear time and universal history. It might seem that the zoo exhibit provides “the image of global history consumed – at a glance – in a single spectacle from a point of privileged invisibility”²⁹³ as a prime illustration of the panoptical time. However, I suggest that in the context of the zoo this idea might be even extended to a three-dimensional “dioramic time” that adds motion and an impression of depth into the natural historical storyline of the origins of life and human civilization. Usually habitat dioramas as visual technologies developed in the end of the nineteenth century are discussed in terms of spatiality, illustrating representations of certain topography and environmental features of the given species and its habitat.²⁹⁴ However, one of the main functions of habitat dioramas as educational tools is to orient its spectators spatially and temporally by creating an illusion of the animal’s habitat and showing different phases of its life: from childhood (eggs, neonates) through adulthood (the perfect form usually embodied as male) and sometimes death (bones, skeletons). In this way dioramas instruct about the natural developmental change – a basic temporal disposition.

But temporalities of dioramas and zoo exhibits can be even messier. By showcasing the natural progression of time and embodying the ultimate origin, the diorama also positions its viewers within, and synchronizes them with, vast evolutionary landscapes stretched across millions of years. The diorama instructs about how change happens. As Haraway notes in her opening paragraph describing the African Hall diorama in the New York’s Natural History Museum: “A hope is

²⁹² McClintock, *Imperial Leather*, 37.

²⁹³ Ibid.

²⁹⁴ Tunnicliffe and Scheerso, *Natural History Dioramas*.

implicit in every architectural detail; in immediate vision of the origin, perhaps the future can be fixed. By saving the beginnings, the end can be achieved and the present can be transcended.”²⁹⁵

Further developing the idea of the naturalization of history, McClintock draws on the close-knit relationship between temporality and spatiality in the commodity spectacle, and supplements her discussion of *panoptical time* with another phenomenon she calls *anachronistic space*. The two are intimately interrelated. Whereas the panoptical time produces a history without women, the trope of anachronistic space is in a way complimentary by encapsulating those subjectivities, which fail to properly inhabit history: women as inherently irrational, the backwards working class, savages without history, primitives stuck on the ruins of their failed civilizations, and perverts lagging behind developmental progress. An environmental philosopher Michelle Bastian notes that Western encounters with seemingly “timeless” primitive societies, enabled through colonization or anthropological research, were used to dismiss them as motionless, static, non-developing,²⁹⁶ a phenomenon known in anthropology as “the ethnographic present.”²⁹⁷ She writes that “to classify something as ‘timeless’ does not, therefore, mean that it escapes time altogether but, rather that, to those doing the classifying, a particular process or culture does not appear to change in significant or relevant ways.”

Building on this classification of anachronistic bodies and societies, the zoo with its heterotopic character serves as an exemplary anachronistic space – accumulating the prehistoric, atavistic, timeless specimens from the lands so far-off they appear to exist beyond history. Consider this excerpt from a popular guide by the director and general curator of the New York Zoological Park from 1929, accompanying the description of the lion exhibit:

In ancient times lions were known in Rumania and Greece, but civilization has long since driven them out of Europe. To-day their range includes the whole continent of Africa, from Cape Colony to Abyssinia, as well as Persia and northwestern India, although in the more civilized districts they are now reduced in numbers or completely exterminated.²⁹⁸

²⁹⁵ Haraway, “Teddy Bear Patriarchy.” 26.

²⁹⁶ Bastian, “Communities out of Joint.”

²⁹⁷ See, Fabian, *Time and the Other*; Crapanzano, “Hermes Dilemma.”

²⁹⁸ Blair, *In the Zoo*, 83–84.

An observation of zoo lions provides an occasion to organize the world according to civilizational progress through the occurrence, taming, and extinction of wildlife. This mapping of spaces along the lines of progress also allows for reimagining the zoo as another type of anachronistic space, where the ancient time of wild beasts is suspended and available for inspection. This produces a dual effect: on the one hand animal bodies on display can be reinvented as eternal referents to a politically potent idea of a mythical and primordial state of nature, while on the other, the same nonhuman and human bodies are captured within the anachronistic space as barbaric, primitive, and underdeveloped creatures suspended in the past.

The corpo-politics of temporality is always specifically gendered, raced, and able-bodied. This is well evidenced in the human zoo practice I describe in detail in chapter 1 with the specific focus on the cases of Saartje Baartman and Ota Benga, both exhibited in zoos. What is the relation to temporality in their display? McClintock points out that within the trope of anachronistic space, the modern medical gaze re-invented the black female body (with a specific focus on genitalia) as a paradigmatic site of anachronism.²⁹⁹ Significantly, black female sexual anatomy becomes anachronistic via its association with the nonhuman, where the animalistic embodiment stands for the backward, atavistic, underdeveloped, and primitive, as well as symbolizing the unregulated sexual pleasure.³⁰⁰ In other words, the nonhuman figuratively and materially functions as a point of reference to the prehistoric time of untamed wildness. Through this association with animality as belonging to humanity's evolutionary past, it produces a temporal dissonance, and thus, allows for re-imagining female anatomy – especially one connected to sexual pleasure – as rudimentary. In this context sexual pleasure, and specifically female clitoral pleasure, functions as an atavism, a primitive lasciviousness or hypersexual aberration of the reproductive norm. Numerous feminist scholars of science demonstrate the consequences of identifying the clitoris as a source of “aberrant” sexual excess – made evident for the nineteenth- and early-twentieth-century physicians via the evidence of masturbation, same-sex desire, or assumed insanity, – through violent practices such as clitoridectomy and other forms of regulating female sexuality.³⁰¹

²⁹⁹ McClintock, *Imperial Leather*, 42.

³⁰⁰ Gilman, “Black Bodies, White Bodies.”

³⁰¹ Duffy, “Masturbation and Clitoridectomy”; Scull and Favreau, “The Clitoridectomy Craze”; Jordanova, *Sexual Visions*; Schiebinger, *The Mind Has No Sex?*; Bennett, “Critical Clitoridectomy”; Moore and Clarke, “Clitoral Conventions and Transgressions”; Traub, “The Psychomorphology of the

This body part was almost compulsively measured, compared, and circumcised, while its alleged pathological nature was used to explain lesbianism, criminality, hysteria, and other behaviors constructed as disorders. Locating atavistic affinity in female embodiment was made possible through the context provided by the zoological exhibition, hailing non-white female bodies on display as anachronistic, and thus exposing the sexual and raced character of this mode of temporal coding in space. This reverberated in constructing female sexual subjectivity in general as anachronistic.

The New Secular Time

Industrial commodity production in the nineteenth century transformed sexual division of labor in Western societies, which had so far centered on the household, and enabled wage-earning individuals to survive outside of familial structures. Furthermore, the growth of urban environments accommodated the newly gained leisure time of wage earners in a variety of ways. In the aftermath of the capitalist free-labor system breaking up the traditional family structure, erotic pleasure was divorced from reproductive sexuality. As numerous historians of sexuality point out, in this way erotic pleasure gained the potential for becoming the driving force for sexual identity formation at the brink of modernity.³⁰² However, to arrive at the point of emergence of homosexuality as an identity category tied to erotic aspects of life, some more careful untangling of the knots in the complex relationships between capitalism and sexuality needs to be done.

Certainly industrial capitalism had a huge impact on how bodies were organized along the assembly line, but it also re-orchestrated the more intimate aspects of the traditional household and led towards a new kind of secular temporality. Elizabeth Freeman attends to the gradual transformation of “cyclical time,” or what Julia Kristeva names the sacred domain of “women’s time,”³⁰³ into the rationalized domestic labor attuned to industrial rhythms of timetables, schedules, calendars, and daily routines. The arrangement of subjectivities along different modes of temporality – from leisure time of wageworkers to static time of the household – exposes a gendered temporal disjunction of this knotted familial chronology. While

Clitoris.”

³⁰² See, D’Emilio, “Capitalism and Gay Identity”; D’Emilio and Freedman, *Intimate Matters*; Chasin, *Selling out*, 10–12; Freedman, *No Turning Back*, 259; Chauncey, *Gay New York*, 133.

³⁰³ Kristeva, “Women’s Time.”

the secularized time of domestic female productivity without wage replaced the religious cyclical time, new forms of ritualization entered the family time carving out space for mass entertainment. Historian John Gillis recounts examples of what he calls the “ritualization of the family life”³⁰⁴: previously celebrated harvest rituals synchronized with the cycles of natural growth were replaced with commercial Christmas, while Sunday preempted the Sabbath. These old forms of temporal orientation were often naturalized. For example, historian E. P. Thompson shows how “labour from dusk till dawn can appear to be natural in a farming community.”³⁰⁵ The appeal of naturalized temporal schemes persists within the secularized temporality. In this new mode of time the weekend constituted a perfect opportunity for family visits to the zoo – a space of encounter with nature prepared for these guests to accommodate their newly gained free time.

For example, the act establishing the New York Zoological Garden from 1895 regulates its accessibility to the public: “admission to the said garden shall be free to the public for at least four days, one of which shall be Sunday, in each week.”³⁰⁶ The same document lists the purposes of the institution as threefold: “encouraging and advancing the study of zoology, original researches in the same and kindred subjects, and of furnishing instruction and recreation to the people.”³⁰⁷ The gradual shift from strictly science-oriented goals towards popular education as the main rationale for zoos was synchronized with the secularization of leisure time. Within this new secular temporality zoological exhibitions provided scientifically approved contact with the natural world, which complemented the industrial exploitation of nature. In this way they also incorporated people into the narratives of civilizational progress. In 1868 *The New York Times* described the overlapping of science and popular education of the zoo: “The Zoological Gardens have rendered real service to natural history by popularizing the knowledge of animals, and giving science a holiday air. They add to the pleasures of the cities and public education, civilization and morality.”³⁰⁸ A visit to the zoo as a seemingly innocent leisure time activity offered a peek into the large timeframe of natural history and facilitated encounters with the grand narratives of continuity and evolutionary change demystifying the wonders of nature.

³⁰⁴ Gillis, “Making Time for Family,” 8.

³⁰⁵ Thompson, “Time, Work-Discipline, and Industrial Capitalism,” 66.

³⁰⁶ New York Zoological Society, “Act of Incorporation,” 65.

³⁰⁷ *Ibid.*, 63.

³⁰⁸ “Zoological Gardens: The Collection of Wild Animals at Central Park,” 5.

The process of “giving science a holiday air” is also well documented by changing rules regarding zoo admissions, illustrating the outreach of these institutions and their main target groups. Entry to the London Zoological Gardens for a long time was possible only for the members of the Zoological Society, or was dependent upon a member’s invitation supplemented with a paid fee, rendering the zoo as an elitist facility geared towards distancing the bourgeoisie from the working classes and their “vulgar tastes.” According to Wirtz, “as the bourgeoisie amassed and accumulated resources, including leisure time, they indulged in an extensive consumer culture and pursued special interests as elite pastimes.”³⁰⁹ From 1850s the Society started extending its admission policies by reducing the price.³¹⁰ Along the changes in the familial time management, the zoo shifted from being an institution targeting the privileged social classes – like the gentlemen collectors and amateur natural historians – towards a public venue combining educational mission with entertainment for wider audiences.

By the late nineteenth and early twentieth century the zoo reinvented itself as a space for learning, and started targeting the middle- and working classes, more carefully accommodating the nuclear family unit. Institutions such as museums and zoos arrange their display specimens according to more or less coherent narratives, and are thus saturated with multiple meanings. The pedagogical mission of the zoo structured the displays, as well as warranted a process that in critical pedagogy is called “the hidden curriculum” – not openly intended transmission of values, norms, and beliefs as the side-effect of the learning process. Helena Pedersen further develops this concept in relation to the zoo into what she terms *zoocurriculum*, or “a species-coded hidden curriculum structuring human-animal boundary work as well as the position and possibilities of nonhuman animals in human society.”³¹¹ Stemming from critical animal studies, Pedersen focuses mostly on the processes that position the human as a privileged species, and through display setting, instruct observers about their possible relations with animal others within this implicit species hierarchy. I suggest that the boundary work of the *zoocurriculum* also includes the transmission of specifically gendered, raced, and sexualized ideas mapped onto the nonhuman animals on display in order to discipline the human bodies in the audience, and to turn

³⁰⁹ Wirtz, “Zoo City,” 66.

³¹⁰ Åkerberg, *Knowledge and Pleasure at Regent’s Park*, 117.

³¹¹ Pedersen, “Animals on Display,” 3.

some concepts (like the family, gender binary, or heterosexuality) into transparent, natural, smooth objects invisible to those whom they privilege. The zoological display not only projects anthropocentric ideas about animal behavior – often with a strong focus on courtship rituals, pair-bonding, and mating modeled on human heterosexual familial structures – but also fixes them as normative notions through placing animal specimens and their human observers along the deep timeline of natural history. This exhibited teleological and progressivist temporality becomes naturalized as a physical law.

This process falls into what Freeman calls *chrononormativity*, or “a mode of implantation, a technique by which institutional forces come to seem like somatic facts.”³¹² The zoo produces such naturalized normative narratives through the corporeal-material presence of nonhuman animals. As mediums for the zoocurriculum, animal bodies are controlled, managed, and displayed within capitalist timescapes,³¹³ and are made available as points of reference for human urbanites. As a temporal mode of disciplining bodies chrononormativity shares a close kinship with Luciano’s *chronobiopolitics* attuned to the capitalist tempo of organizing “individual human bodies toward maximum productivity,”³¹⁴ as well as with Judith Butler’s take on the role of repetition in solidifying and synchronizing the rhythms of gendered performance that freeze masculinity and femininity into timeless and everlasting subject positions.³¹⁵ In a similar way, the normative conceptions of the family, the nation, and even the human, materialized within the zoological exhibition as natural facts via the temporal timeframe of evolution, seem timeless. As such they are made available to the public within the schemes of their own productivity.

Despite these forces producing and reinforcing normative patterns of behavior and identity, homosexuality emerged as a viable point of self-identification for larger groups of people. While some scholars argue that the rise of capitalist rationalization of time, separation between domestic and work life, and medical classifications of sexual disorders allowed for the new secularized temporality to be realized *outside* the familial schemes and genealogies,³¹⁶ according to Freeman, “queer time emerged from *within, alongside, and beyond* this heterosexually gendered double-time of stasis

³¹² Freeman, *Time Binds*, 3.

³¹³ Adam, *Timescapes of Modernity*.

³¹⁴ Freeman, *Time Binds*, 3.

³¹⁵ Butler, “Imitation and Gender Insubordination.”

³¹⁶ D’Emilio, “Capitalism and Gay Identity.”

and progress, intimacy and genealogy (emphasis mine).”³¹⁷ Therefore, it is time to trace more closely the trajectory of this queer temporality and investigate the role of nonhuman animals in the chronobiological organization of life.

Time of Queer Beasts

The combined effects of chronobiopolitics, chrononormativity, and zoocurriculum are not as permanent as one might expect, given that queerness manages to surface even in such a highly regulated and carefully cultivated space as the zoo. In his influential essay, historian John D’Emilio describes the emergence of homosexual identity through a process of transition from the household family-based economy into the capitalist economy, which gradually carved out working time outside of the domestic sphere. He argues:

Only when individuals began to make their living through wage labor, instead of as parts of an interdependent family unit, was it possible for homosexual desire to coalesce into a personal identity – an identity based on the ability to remain outside the heterosexual family and to construct a personal life based on attraction to one’s own sex.³¹⁸

To add to this analysis, the environment of the modern metropolis created multiple possibilities for non-normative sexual practices to be realized in the shady folds of public spaces – often in parks and other recreational green spaces that share close affinity with the zoo. Additionally, medical classifications of sexual disorders, refashioning the sin of sodomy into a kind of developmental atavism, contributed to the process of shaping sexual identity into an inborn condition. As an atavism or a kind of developmental “delay,” medical professionals constructed homosexuality as an anachronistic state through the association with the nonhuman animality. Many classifications relied on the idea of regression to a primordial state of hermaphroditism attributed to lower animals. This process echoes the raced and gendered construction of the female black sexual anatomy as a site of anachronism I described earlier in this chapter. Nevertheless, even the deeply pathologizing scientific models of sexual inversion were generative in definitions of sexual desire, with which some people identified, and channeled their desires and erotic practices into new ways of life within the emerging urban gay and lesbian subcultures.³¹⁹

³¹⁷ Freeman, *Time Binds*, 23.

³¹⁸ D’Emilio, “Capitalism and Gay Identity,” 104–5.

³¹⁹ Chauncey, “From Sexual Inversion To Homosexuality”; Oosterhuis, *Stepchildren of Nature*.

D'Emilio's argument about queer identities being time-specific products of capitalism binds them to the new temporal organization allowing wage laborers to seek erotic pleasure outside of heterosexual coupling. This observation pinpointing the historical contingency of sexual identity is aimed against what he calls "the myth of the eternal homosexual" – one paradoxically forged by the same shifts in social relations revealed as the shared basis of sexual repression and liberation.³²⁰ The idea that gay, lesbian, and transgender persons can be found across all societies and throughout history has been an essential component and the driving force for the gay liberation movement. It remains the backbone of identity politics until today. In her project of queering historiography Carla Freccero traces the origins of many strands in sexuality studies into the cultivation of "desires in the present to prove the persistent existence of same-sex desires and communities over time, or desires to characterize modernity's relation to same-sex desires and communities as different from or similar to the past, thereby identifying the specificities of modernity's sexual regimes—in short, to intervene politically in the present by using the past."³²¹ Likewise, the desire to label nonhuman animals engaging in same-sex sexual acts as gay or lesbian, and the subsequent desire to utilize them as a way of validating homosexual identity as immutable, everlasting, and fixed, is yet another iteration of the same rhetoric that became integrated into the repertoire of political tactics. In this version the "eternal homosexual" myth is transgressing species boundaries and finds a powerful anchor in the idea of timeless laws of nature. Paradoxically, this move mirrors the workings of chrononormativity hailing the zoo as a procreative space with the same anchor in naturalizing temporality.

Of course sexual diversity in the animal kingdom itself is not a myth. I am rather referring here to the political tactic that utilizes nature as a referent. As I described in the previous chapter, already some of the first sexologists have applied this tactic in their sexual taxonomies outlining the versatility of homosexual behavior across cultures, historical periods, and ultimately species. Unsurprisingly, the scientists directly engaged in the homosexual emancipation movement, like Havelock Ellis or Magnus Hirschfeld, were mostly invested in this type of reasoning. It was those first outspoken sexual rights advocates who devoted parts of their scientific classifications to the occurrences of same-sex behavior in the animal kingdom,

³²⁰ Foucault, *The History of Sexuality*, 1988.

³²¹ Freccero, "Queer Times," 488.

probably in the hope for finding an undeniable proof of homosexuality being rooted in something everlasting, stable, and transcendental. In this sense, the zoo and its knotted temporality form an ambiguous terrain for political emancipation: on the one hand as a space of ultimate confinement, often compared to the prison – an archetypical hotbed of degenerate and unnatural behavior – it might serve as a rather risky tribune, while on the other, the transcendental idea of Nature offers itself as a powerful anchor for the newly gained identity. Bastian explains how through a strong focus on rationality and the logically linear progression traditional Western philosophy constructed time as an external constant perceived as a law of nature. She writes: “Nature thus becomes the expression of underlying logical physical laws that promise one day to be uncovered, enabling all natural systems to be predicted and managed.”³²²

The chronology of queerness is far from smooth. It is found in the ephemeral nature of nonreproductive sexual acts, the discontinuous history of perversion, and the stuttering time of subjectivities in flux. Queer subjectivities were always part of the official history inasmuch as they served as anti-examples of moral, civilizational, or developmental decline – prostitutes, gays, circus freaks, lesbians, hermaphrodites, criminals, lunatics, and other perverts in many ways legitimized the logic of progress. For Freeman, “queer temporalities, visible in the forms of interruption, ... are points of resistance to this temporal order that, in turn, propose other possibilities for living in relation to indeterminately past, present, and future others: that is, of living historically.”³²³ What does it mean if one adds the past, present, and future nonhuman others to this equation? Although queer animals have been utilized as an evidence for homosexuality and gender variance in humans, the occurrences of same-sex sexual behavior in the animal kingdom are often reported as momentary, circumstantial, and ephemeral. In this sense, queer zoo animals offer a rupture in the zoological hegemonic repronormativity, which enlivens temporality as linear and teleological through biological and technological forms of replication of individuals and species.

The paradox of these unruly creatures performing the symbolic labor that helps to solidify human identity formations as naturally eternal, while maintaining a flickering, unstable, and fleeting presence in the natural historical archives, brings them into close kinship with queerness understood as a glitch in the chrononormative

³²² Bastian, “Inventing Nature,” 104.

³²³ Freeman, *Time Binds*, xxii.

regimes.³²⁴ In the zoo, animals which do not reproduce are either redundant or problematic if they belong to an endangered species. If they are identified as a queer species, their exoticized non-normative allure can be utilized to spice up the debates on human sexuality. In this way queer animals inscribe well into the “eternal homosexual myth” logic, particularly alongside the idea that homosexuality can be coded in genes. At the same time, as a historically contingent phenomenon they can also inspire queer playfulness, as well as forge interspecies kinships outside of the identitarian regimes. However, if the flickering time of queer erotics holds the power to disrupt the normative temporal schemes of heteroreproduction, what consequences does it produce for the dominant zoo narrative of species survival? This requires a closer investigation of the ways reproductive principal functions in the zoo, and how it encompasses queer animality when it becomes visible.

From Hagenbeck to Hediger: the Zoo’s Conservation Turn

In May 2015, an article in *The New York Times* featured a bizarre description of a turtle’s penis that “looks a bit like a medieval weapon. Equipped with fleshy spikes, protuberances and lobes, it is designed to navigate the female’s equally complex reproductive organ, located inside a byzantine chamber called the cloaca.”³²⁵ Soon the anachronistic anatomical language of “medieval weapons” and “byzantine chambers” gives way to a science-fiction-sounding passage on turtle sex with “electrical probe to induce a partial penile erection” and “fiber-optic endoscope to locate the compartment leading to her oviducts.”³²⁶ These rather racy excerpts from the Science section of *The New York Times* might seem like an *outré* cyber erotica, but in fact, are part of a story detailing the latest conservation efforts of an international team of scientists, zookeepers, and veterinarians to save the Yangtze giant softshell turtle. With only four known specimens left – one of them female – these largest freshwater turtles are critically endangered. Members of Turtle Survival Alliance gathered at the Suzhou Zoo near Shanghai, where the last female is kept, to try the artificial insemination method as the last resort to save the species from extinction, hence, the hi-tech ARTs equipment mentioned in the sci-fi part of the article. With this focus on *ex situ* conservation the space of the zoo symbolically

³²⁴ Freeman, *Time Binds*.

³²⁵ Nuwer, “Scientists Make Novel Attempt to Save Giant Turtle Species.”

³²⁶ *Ibid.*

transformed from the Gardens of Eden cultivating utopian aesthetics of nature, into Noah's Ark, managing captive breeding programs to arrest the crisis of species death. The juxtaposition of the ancient creatures at the brink of extinction with the futuristic devices of reproductive technology remodels the zoo as the time-warping machinery forestalling the catastrophe of species loss. The desperate temporality of extinction dictates the measures undertaken to save endangered species and shapes the goals for contemporary zoos as nature conservation units. In this context, managing animal sex for maximizing their breeding capacities became key in the renewed zoo enterprise devoted to reproducing species into the future.

Whereas earlier the mission of the zoo oscillated between entertainment and education for the human audience, from the mid-twentieth century zoos shifted towards the modern animal welfare model, reinventing themselves institutionally as flagships of wildlife conservation. In tracing the itinerary of this shift Matthew Chrulew argues that zoo history often celebrates the "Hagenbeck revolution" in landscape design, while largely ignoring another breakthrough innovation that shaped the zoological parks' livestock management in line with a system of intensive biopolitical control.³²⁷ Credited to a Swiss biologist and zoo director, Heini Hediger, the new revolution in zookeeping practices might seem less spectacular, as it was realized through a series of tedious detailed guidelines in animal veterinary care, nutrition regimens, interaction distance protocols, and breeding practices. However, it privileged animal wellbeing and species-specific needs over spectators' entertainment, as well as redirected institutional focus towards research and conservation. This is how Chrulew describes Hediger's revolution:

Responding to the problems of high mortality rates, failure to breed, and repetitive, stressed behaviour, on the basis of long-term, species-specific observation and experimentation, Hediger set down guidelines for the production of healthy, happy animals willing to mate and display natural behaviours, and thereby laid the groundwork for contemporary zoo biology and such practices as animal training, environmental enrichment and captive breeding.³²⁸

Intensifying critiques of animal confinement in the zoo, denouncing the deteriorating living conditions that these premises could offer to its captives across postwar Europe and North America, prompted these new zoo practices to be widely adopted and

³²⁷ Chrulew, "Managing Love and Death at the Zoo," 143.

³²⁸ *Ibid.*, 138.

standardized.³²⁹ This transformation was additionally fueled by the developments in zoo biology with vitamins, vaccines, antibiotics, and reproductive technologies available for zookeepers, now rebranded wildlife managers. This conservation turn in zoo management critically relies on the catastrophic temporality of species loss. More importantly, by refocusing on species reproduction as the means of delaying this loss, it inscribes managing captive bodies and wildlife populations into chronobiopolitical mode.

Nevertheless, environmentalist discourses rehearsed in the reformed zoo are neither innocent, nor only benevolently concerned with the wellbeing of nonhuman animals for the sake of their survival, without implicating larger structures of power. Uddin scrutinizes the triumphant history of the American zoo renewal – a major trend in renovating animal public displays that accompanied the Hediger-inspired revisions in animal husbandry. By tracking the changes in postwar zoo design from Omlstedian naturalism through modern minimalism, to immersion exhibit she exposes the underlying racial tensions that were negotiated through the renewal practices. The immersion exhibit as the “future” of nature display was born out of a sustained critique of the so-called “naked cage” the previous two modes of design produced. “The naked cage” – she writes – “gave urban shame zoomorphic form, heightening it through images of once noble animals stripped of their dignity and suggesting that the shame of the American city was marked by species as well as racial difference.”³³⁰ Uddin analyzes the discourses of the zoo rebirth in close relation with racially charged antiurbanist anxieties buzzing with accumulated tensions around the time of urban renewal. The process of refurbishing the “zoo slums” – often portrayed as the aftermath of the failed project of modernist sanitary architecture with its love for biomorphic forms sculpted with concrete, glass, steel, and tiles – into urban sanctuaries or modern bioparks grounded the alliance of modern zoos with the rapidly growing environmental movement. In more general terms, the idea that the zoo was reinventing its formula and structure (whether through the Hagenbeck revolution, Hediger’s innovation, or urban renewal) is closely tied to the linear temporality of institutional development. Terms such as rebirth, renewal, reform, or revitalization, all

³²⁹ In chapter 2 I made clear how these concerns about zoo animals’ welfare were closely tied to positing aberrant behaviors against normality.

³³⁰ Uddin, *Zoo Renewal*, 30.

imply a temporal advancement and improvement, and are indebted to the logic of growth and sustained through the logic of vitalism.

Moreover, as both Rothfels and Hanson point out, this massive revitalization of the zoo towards a nature stewardship model gathering pace around the 1960s and 1970s, was partly induced by the introduction of international wildlife protection laws, radically curbing the trade in endangered species.³³¹ With colonial empires dissolving after World War II, newly emergent nation states restricted export in wild animals. Simply put, zoos could no longer count on seizing wild-caught specimens, and therefore turned towards reproducing the existing captive populations in a coordinated manner. With only sample animal populations in insular ecosystems at hand, each institution started to depend more on national and international cooperation within zoo networks not only in terms of knowledge transfer, but also when it comes to exchanging breeding specimens (or just their gametes). Based on fragmental and dispersed records within the system of studbooks and kinship charts inherited from agricultural livestock management, modern zoos needed to consolidate and regulate their selective breeding policies. In result of this harmonization, which is part of the shift in institutional focus from entertainment towards care and conservation, all individual reproductive specimens of the same species in different zoos accredited within the same network became folded into one genetic pool, to avoid inbreeding.

The complex machinery of this reform in wildlife management is well detailed in Irus Braverman's *Zooland: The Institution of Captivity*, which illustrates the bureaucratic work behind the scenes of the romantic, exotic zoological exhibits.³³² Zoological technologies of governance include electronic databases, registrars, medical records, kinship charts, and specialized data assessment tools to monitor captive populations and ensure maximum diversity in their genetic management. The rational capitalist time-orientation is perfectly adapted in the zoological technologies of reproducing biological life into the future. By analyzing these modern surveillance techniques applied to nonhumans, Braverman shows how institutional adaptations in contemporary zoos inscribe into the Foucauldian framework of pastoral power – the power of care.³³³ However, zooland from the perspective of its managers, as presented

³³¹ Rothfels, "Immersed with Animals," 2017; Hanson, *Animal Attractions*, 166–67.

³³² Braverman, *Zooland*.

³³³ Foucault, *Security, Territory, Population*.

by Braverman, appears to serve foremost as an archive of genetic memory with intense surveillance in the form of record keeping as one of its vital mnemonic practices. In this way, paradoxically this institutional rebirth of the zoo – one aiming at breaking with earlier exhibiting practices – resulted in a new version of accumulative temporality that was typical for menageries and early collections as discussed in chapter 1.

The conservation turn observed in modern zoos had an important side effect to be considered in the genealogy of queer animality – namely it centered sexual reproduction (even if heavily mediated by technology) as the keystone for animal welfare and species survival. This was evident in the efforts to save the giant softshell turtle from my opening paragraph that unequivocally focused on reproductive sexuality of these nearly extinct creatures. These kinds of heroic stories of saving species from oblivion and actively combating extinction in the zoo through the use of modern reproductive technologies form the predominant discourse on the role of these institutions today. In this context, the shift from Hagenbeck’s revolution to Hediger’s one, that enabled this new environmental futurism, should be conceptualized in terms of a shift from “compulsory visibility” to “compulsory heterosexuality,” with visual register still powerfully present. While Hagenbeck revolutionized the exhibition practices rendering nonhuman animals permanently visible for human observers, Hediger’s animal welfare reform resulted in centering livestock management on reproduction. The zoological project of reproducing endangered species into the future not only implicates heterosexual reproduction and sexual dimorphism as naturally essential for the preservation of biological life, but also moves this institution beyond the mnemonic machine function into a new type of futurism.

Reproductive Futurism and Animal Sex in Public

Reproduction understood as an act of replicating or generating living beings forms the backdrop for the biological mechanism of carrying life into the future. Through efforts to reproduce the species threatened with extinction, the institution of the zoo not only seems to assure a delay of the apocalypse, but also promises a future where certain life forms are preserved; rare creatures are miraculously saved from oblivion and are made materially extended into the future. At the same time, these pronatalist speculative futures symbolically and materially foreground the act of heterosexual procreation as an assurance of species survival and the maintenance of

social order through reproduction of living matter, natural resources, and labor force. Feminist scholars who study different modes of reproducing nonhuman animals expose the intensive traffic between human and nonhuman reproductive technologies, and show that it is crucially linked with the reproduction of social systems of power and identification.³³⁴

Biological reproduction conceptualized as a vehicle for continuing the social body and its structures into the future entails prolonging the life of institutionalized fantasies of the nation, capital, class, or family. In the same vein the practices of breeding nonhuman animals in the zoo (and more specifically its representations) carry codes of gender and sexual normativity that are central for the production of thorny discourses of kinship, decent, and bloodline. Projects focused on breeding native species, while exterminating species that are considered invasive, are a potent ground for developing national identities along these animal symbols of belonging and alienation. Moreover, the fleshy bounds of these biological and semiotic forms of lineage help in imagining time as a linear progression forward, from generation to generation. This temporal continuity stimulates an acute need for preserving the trickle of life by extending living organisms (or their bodily parts that contain information about life) into the future. In this way the zoological anti-extinction machinery concerned with issues of sustainability and biodiversity could be termed as an expression of environmental futurism. Based on the idea of reproducing species against extinction it critically depends on reproductive futurism. Compulsory biological reproduction of species in the zoo is also a future-oriented ideological formation, securing the world-as-we-know-it, with a given inventory of living species to be sustained. What are the consequences of this kind of futurity for broader sexual politics?

The so-called “anti-social” strand of queer theory sets itself directly against the logic of reproductive futurism.³³⁵ Lee Edelman best describes the link between future and reproduction in his provocative manifesto *No Future*, where he argues that the figure of the Child represents the heteronormative fixation on securing the survival of social reality through “the compulsory narrative of reproductive

³³⁴ See, Ritvo, “Possessing Mother Nature: Genetic Capital in Eighteenth-Century Britain”; Franklin, *Dolly Mixtures*; Friese and Clarke, “Transposing Bodies of Knowledge and Technique.”

³³⁵ Edelman, *No Future*; Halberstam, “The Politics of Negativity in Recent Queer Theory”; Halberstam, “The Anti-Social Turn in Queer Studies.”

futurism.”³³⁶ By linking queerness to the death drive as the flip side of the pro-life heteronormative politics with its promise of futurity, Edelman intends to disjoin queer desire from the regime of life understood as an ideological figuration of progress. Jack Halberstam recognizes Edelman’s negativity as part of the anti-social turn in queer theory,³³⁷ and argues for embracing it as a form of an alternative political imaginary, which locates itself outside the reproductive temporality of the family and child rearing inscribed into the capitalist mode of production. Following these remarks I wonder what alternative visions for politics does queer negativity offer as the possibility for transforming dominant ideas about survival, evolution, extinction, and normativity proliferating in zoological reproductive futurism?

When Edelman argues that the future is “kids stuff,” he marks the limits of his anti-relational queer theorizing about reproductive futurism within the figure of the *human* Child. He points out that “the figure of this Child seems to shimmer with the iridescent promise of Noah’s rainbow, serving like the rainbow as the pledge of a covenant that shields us against the persistent threat of apocalypse now – or later.”³³⁸ This formulation transposed onto to the figure of a nonhuman Cub – just to choose one nonhuman neonatal form – still works within the same logic of compulsory heterosexuality as a central figure for the zoological spectacle of nature conservation. It is also in perfect synch with the zoological mythology of the Ark carrying two animals of each kind and the opposite sex as the minimum requirement for preserving life beyond the apocalypse. Every birth of an endangered species brings the zoo closer to achieving its wildlife conservation goals. Every giant panda or polar bear cub contributes to its species reproductive success and becomes a token in the environmental politics of cuteness. Every rare egg hatched delays the crisis of extinction. Every spectacular birth broadcasted from the zoological backstage serves as lively proof of the effectiveness of the zoo’s salvic efforts.

Nonetheless, zoological reproductive futurism is mostly realized via the mundane management of captive animal populations organized within the bureaucratic structures of Species Survival Plans (SSPs), Population Management Plans (PMPs), and Taxon Advisory Groups (TAGs) developed during the 1980s. As Braverman puts it, these cooperative breeding programs “serve as control towers for

³³⁶ Edelman, *No Future*, 21.

³³⁷ Halberstam, “The Anti-Social Turn in Queer Studies.”

³³⁸ Edelman, *No Future*, 18.

the movement of zoo animals between accredited zoos, in effect shaping the face of zoo exhibits across the country and demonstrating the potentially benign power of the panopticon.”³³⁹ The SSPs provide detailed recommendations about which two individual animals should be bred, based on the documentation of their pedigree, health, and genetic value. In order to maintain maximum genetic diversity they also define the limits of reproducing animals in captivity – after a certain point of breeding, some animals are administered contraceptives, while the so-called “surplus animals” or “genetically redundant” individuals are culled. As Chrulew points out “the intensive care” exercised in the zoo “has its dark underbelly, too, such as when the unloved surplus of breeding programmes are quietly euthanised for reasons of (un)utility.”³⁴⁰ With its stakes in both bio- and necropolitics exercised on animal bodies, the zoo’s administrative apparatus carefully selects those nonhuman Children/Cubs that will be loved by the public and promised a future within the zoological industrial complex. These decisions are dictated by two kinds of economy: the economy of space that is always scarce in the zoo, and the economy of genetic value, which turns animal bodies, or their parts such as tissues or gametes, into the commons of the grand project of species survival. Survival is defined through the preservation and proliferation of genetic material, making zoo animals into living genetic reservoirs for their species. What is the position of queer acts within this highly controlled environment geared towards reproducing for the future?

In the dominant zoological narrative the promise of genetic immortality and the consistent upholding of species variation not only privilege sexual reproduction over asexual forms of replication, but also indirectly disavow homosexuality imagined as an evolutionary dead end. Imagine if the only remaining female giant softshell turtle was not interested in mating with any of the males? Of course modern reproductive techniques can overcome this, because the sexual act becomes obsolete through cloning as an asexual form of reproduction. In general terms the logic of reproductive futurism makes “gay relationships stand entirely outside a procreative framework,”³⁴¹ as D’Emilio’s puts it. However, those queer acts could have been recognized as such, only after the separation of sexuality from procreation. The liberation of sexual desire from the constraints of the reproductive imperative also

³³⁹ Braverman, *Zooland*, 162.

³⁴⁰ Chrulew, “Managing Love and Death at the Zoo,” 139.

³⁴¹ D’Emilio, “Capitalism and Gay Identity,” 12.

contributed to the pronouncement of homosexuality within the vocabulary of nonreproductive sameness, making it symbolically absolved from any form of temporal continuation. In other words, homosexuality defined through “pure” sexual desire and in absolute contrast to any reproductive forces might be just another identitarian myth that needs revision from a queer theoretical perspective. Michael Warner argues: “reproduction usually implies eros; but when identity is apprehended as desire as in same-sex or cross-race relations, its reproductive telos disappears. This very incommensurability between genetic and erotic logics suggests that queerness, race, and gender can never be brought into parallel alignment.”³⁴² Given the history of control over the reproductive choices of queers, including forced sterilization targeting intersex persons, indigenous and ethnic minorities, the HIV positive, disabled people, and transgender persons until today, I see a need for rethinking the anti-relational slant against reproduction in queer theory.

Zoological Compulsory Heterosexuality

In her influential essay that introduces the term “compulsory heterosexuality,” Adrienne Rich suggests treating heterosexuality as a political institution equipped with its own means of propagation and enforcement, in order to abolish its naturalized reign. She asks “why species survival, the means of impregnation, and emotional/erotic relationships should ever have become so rigidly identified with each other?”³⁴³ To dismantle this powerful triad would mean to undermine the status of heterosexuality as a timeless natural inclination. When transposed onto nonhuman animals through dominant representations of animal sex as naturally motivated by the reproductive drive, compulsory heterosexuality renders same-sex behavior in the animal kingdom an impossibility, aberration, or a temporary confusion at best.

The primacy of sexual reproduction in evolutionary theory contributes to the marginalization of non-reproductive forms of sexuality in biological sciences. Against this logic, feminist science studies scholars demonstrate that homosexuality and gender variance in nonhuman animals do not violate any evolutionary laws, but rather inscribe well into the mechanism of natural selection.³⁴⁴ According to Elizabeth Grosz, unproductive sexual behavior cannot be ranked as disadvantageous for

³⁴² Warner, *Fear of a Queer Planet*, xviii.

³⁴³ Rich, “Compulsory Heterosexuality and Lesbian Existence,” 35.

³⁴⁴ Roughgarden, *Evolution's Rainbow*; Hird, “Animal Transex,” March 1, 2006; Grosz, *Becoming Undone*, 2011.

species survival or hinder variation on the grounds of the classic Darwinian evolutionary theory, but rather, she claims, “homosexuality and all the other possible encounters enabled by sexual attractions of various kinds are part of the production of variations for its own sake.”³⁴⁵ Moreover, for her, “reproduction is the side effect, or by-product of sexuality, not its purpose, aim or goal.”³⁴⁶ Abandoning the teleological understanding of reproduction would mean inscribing all types of sexuality into the evolutionary timeframe. This also calls for a redefined understanding of what evolutionary temporality is. Eco-feminist Val Plumwood attempts at this kind of reformulation by asking: “Why can’t we see evolution, for example, as a form of testing and learning, like trial and error, a form of wisdom?”³⁴⁷

However, usually the biological narrative, especially as it is presented in the zoo, displays the relationship between reproduction and sexuality as interdependent. In these narratives, popularized in “edutainment” tools utilized widely in wildlife film, natural history museums, and zoo exhibitions,³⁴⁸ animal sex always boils down to reproductive sex. It is not considered obscene as long as animals engage in it instinctively, only with the purpose to procreate. Grosz demonstrates that even sociobiological attempts at explaining animal homosexuality as a form of companionship, rehearsal for heterosexual courtship, or altruism supporting the proliferation of the abstracted “selfish genes” of the close kin, radically desexualize it in order to forcefully fit these non-normative sexual expressions into the model of reproductive “compulsory heterosexuality.”³⁴⁹

Especially within the confines of the zoo, nonhuman animals are assumed and expected to engage in heteroreproductive sex only, because their sexuality is a function of their survival. That explains why same-sex sexual behavior among zoo animals, which does not in any way inscribe into the repronormative narratives of domesticity, marriage, family, and parenting (patterns reproduced in the homonormative love sagas of penguins I describe in chapter 4), is likely to be deemed deviant, backwards, or redundant from the privileged viewpoint of a future-oriented heteronormativity.³⁵⁰ This dilemma touches upon the paradox that Edelman points to:

³⁴⁵ Grosz, *Becoming Undone*, 2011, 130.

³⁴⁶ Ibid.

³⁴⁷ Plumwood, “Nature as Agency and the Prospects for a Progressive Naturalism,” 125.

³⁴⁸ Chris, *Watching Wildlife*, xii.

³⁴⁹ Grosz, *Becoming Undone*, 131.

³⁵⁰ Stevi Jackson argues that Rich’s “compulsory heterosexuality” could be regarded the forerunner of the term heteronormativity. See, Jackson, “Interchanges,” 105.

Homosexuality, though charged with, and convicted of, a future-negating sameness construed as reflecting its pathological inability to deal with the fact of difference, gets put in the position of difference from the heteronormativity that, despite its persistent propaganda for its own propagation through *sexual* difference, refuses homosexuality's difference from the value of difference it claims as its own.³⁵¹

In discussion with Edelman's radical rejection of familial futurity, José Estaban Muñoz argues for a queer futurity, where queerness is configured as an ontological possibility looming on the horizon. Muñoz still critiques the "autonaturalizing temporality" of the *straight time* that clings to the cramped temporality of the mundane everyday. Building on Edelman's argument, he notes that within the constraints of the straight time "the only futurity promised is that of reproductive majoritarian heterosexuality, the spectacle of the refurbishing its ranks through overt and subsidized acts of reproduction."³⁵² This particular critique of reproductive futurism makes the zoological heterotopia strangely familiar within the familial matrix of heterosexuality as a survival strategy, in which assisted reproductive technologies are used for the selective breeding of endangered species.³⁵³ The most advanced technoscientific modes of reproducing animals practiced at zoos nowadays with the use of genetic engineering, cloning, in vitro fertilization, and cryopreservation of gametes bring out new forms of temporality. Moreover, these biotechnological tools arguably put queerness on the horizon considering the promiscuous possibilities offered by modern transbiology – "a biology that is not only born and bred, or born and made, but made and born"³⁵⁴ – with its promises to revive species that already went extinct, clone organisms, or produce interspecies hybrids.

In *Cloning Wild Life* Carrie Friese illustrates how experiments in cloning endangered species mediate conflicting meanings and anxieties ascribed to modern reproductive biotechnology (especially in terms of ethical debates around in vitro fertilization and human embryonic stem cell research). In the wake of mass extinction sweeping some of the last representatives of critically endangered species, transbiology with its outward orientation towards the future still holds an ambiguous

³⁵¹ Edelman, *No Future*, 60.

³⁵² Muñoz, *Cruising Utopia*, 22.

³⁵³ "Overt and subsidized acts of reproduction" are in fact best observed in the zoological spectacle of reproducing giant pandas I closely analyze in chapter 5.

³⁵⁴ Franklin, "The Cyborg Embryo," 171.

status – it might be a promise of salvation, or that of monsters.³⁵⁵ The very techniques of interspecies nuclear transfer (popularly known as cloning) use domestic animals as egg donors and surrogates in order to reproduce rare specimens. For example, the 2003 project of cloning an endangered species of wild bovine called Javan banteng involved extracting the nucleus from a skin cell obtained from a captive specimen before it died in 1980 – the tissue sample was stored in the Frozen Zoo at the San Diego Zoo Institute for Conservation Research. The DNA sample was then transferred into an ovum of domestic cow, and the embryo implanted into a cow acting as a “maternal container.”³⁵⁶ Animals born thanks to the method of nuclear transfer are in fact interspecies hybrids between banteng and domestic cattle. In this sense the techniques of cloning perform several tasks at the same time: they challenge the classificatory species boundaries, reevaluate the idea of genetic purity, and redefine the distinction between sexual and asexual reproduction. More importantly for this discussion, these transbiological techniques radically warp the idea of linear temporality, as reproduction is made possible even postmortem with the use of cryopreserved somatic cell lines from deceased animals.

In terms of temporal transgressions, Friese underscores that “cloning allows for biological time to be folded back and thus potentialized for the future.”³⁵⁷ She also highlights the importance of accounting for the vectors of various “transpositions” that these biotechnologically supported reproductive futures are founded upon: in the process of somatic cell nuclear transfer, domestic animals are performing reproductive labor for endangered species, while the symbolic value of endangerment buttresses support for biotechnology beyond the environmental conservation mission. Nevertheless, scientists from the San Diego Zoological Society argue for the benefits of these methods for zoo species conservation by claiming that “the future for clonable species would clearly be better than that for animals that cannot be cloned.”³⁵⁸

These transpositions also radically transform the zoo and its role in the wake of the extinction crisis. From the vantage point of the conservation mission and with the aid of the biopolitical apparatus of managing animal reproduction, the zoo serves

³⁵⁵ Haraway, “The Promises of Monsters.”

³⁵⁶ Janssen et al., “Postnatal Management of Chytrid Banteng Calves Cloned by Nuclear Transfer Utilizing Frozen Fibroblast Cultures and Enucleated Cow Ova.”

³⁵⁷ Friese, *Cloning Wild Life*, 115.

³⁵⁸ Cohen, “Can Cloning Help Save Beleaguered Species?”

as an archive of genetic memory and technical skills of administering life-prolonging technologies of reproduction, and as a repository for the future. The new Ark welcomes genetically engineered animals, matched through the data assessment software of the SSPs, and “made to be born” in labs with the use of tissues stored in genome banks. It is no longer necessary to ship animals between institutions in order to breed them – now the traffic can be reduced to their bodily parts (gametes, tissues, or embryos). This innovation creates an opportunity for zoos to access tissues extracted from wild specimens that would allow for diversifying the limited genetic pool of their captive populations, without breaching wildlife anti-trafficking regulations. This process might also generate what Catherine Waldby refers to as “biovalue,” namely the “capacity of tissues to lead to new and unexpected forms of value.”³⁵⁹ In the framework of SSPs “wild” samples represent greater value than the “captive” ones, because they enrich the genetic diversity of insular breeding pools in the zoo. Considering the commercial stakes in the zoo industry operating according to the sustainability guidelines of the SSPs defined by Haraway as “a trademarked complex, cooperative management program of the American Zoo and Aquarium Association (AZA),” the biovalue of reproductive tissues extracted *in situ* is predicated upon social inequalities and geopolitically specific patterns of dispossession that retrace the colonial paths of animal trade.

In a broad perspective of wildlife conservation politics, the role of the zoo focuses more and more on shepherding the genomes of captive populations rather than the animals themselves. It follows the logic of genetic essentialism, where the living animal is just an expression of the genetic information that makes up for its species being. These levels of abstraction carve out new speculative futures for wildlife conservation management that rely on the production of durability and find their perfect realization within the institution of the “frozen zoo.” Developed as genome banks, these visionary collections store the cryopreserved cells of endangered species for future use in breeding them back from extinction with the use of cloning technologies. The largest facility of this kind storing over 10,000 living cell cultures, oocytes, sperm, and embryos is trademarked as the Frozen Zoo®. The San Diego Institute for Conservation Research that runs it, is in close collaboration with the San Diego Zoo and San Diego Zoo Safari Park described as “a critical safety net” for

³⁵⁹ Waldby and Mitchell, *Tissue Economies*, 108.

maintaining and establishing self-sustaining populations and ensuring biodiversity.³⁶⁰ As a database of animal life, the frozen zoo was designed to remember the past by freezing its potentiality for becoming an animal form. It is a strangely taxidermic project – one that not only produces permanence in a gesture of bio-remembrance, but also aims at turning back time through creating an opportunity for reviving formerly extinct species. Unlike taxidermy however, it drops the drag of visual spectacle, or rather moves it from the display to the domain of media representation (news, wildlife film, or television series).³⁶¹ In the frozen zoo, incarnated animal specimens are scaled down to cell samples – diversity coded in a minimalistic karyotyped sequence of life trumps the aesthetics of fleshy forms or furry taxidermic sculptures. As another iteration of capital accumulation, this futuristic Ark piously follows the rules dictated by the economy of space that determines zoological wildlife management, and in this way catches up with the fast pace of accelerated capitalism in the digital age. But does this new form of zoological conservation leave any room for mourning species death, or is it entirely consumed by the promise to remove this need altogether?

Time of Extinctions

“Don’t go bare, panthers are rare.” This rhyming pun can be found on a condom case handed out at various community events across the U.S. The colorful packaging has a drawing of a big cat on it, and inside a dose of “bare” facts about the endangered Florida panther. One can choose between witty wrappings featuring other endangered species: the Leatherback sea turtle, the Polar bear, the Dwarf seahorse, the American burying beetle, the Puerto Rico rock frog, the Jaguar, the Snail darter, the Spotted owl, the Flat-tailed horned lizards, the Sea otter, or the Whooping crane, among others. But what do condoms have to do with endangered species? This playful contraception, smuggling wildlife conservation eco-propaganda, is part of the Endangered Species Condoms project launched by the Center for Biological Diversity in 2009. The population and sustainability team of this nonprofit organization decided to bring public attention to the link between human population growth and species extinction, and at the same time address the issue of universal access to contraception and reproductive healthcare. On their webpage they state:

³⁶⁰ “Strategic Priorities.”

³⁶¹ For a discussion on the film *Jurassic Park* as the mediated spectacle of bioscience, see, Franklin, Lury, and Stacey, *Global Nature, Global Culture*.

The rapid growth of our human population is pushing other species off the planet in what most scientists are calling the sixth mass extinction crisis. Yet this population explosion is too often ignored by the public, the media and even the environmental movement, while it continues to drive all the major environmental problems that plague our planet — including climate change, habitat loss, ocean acidification and resource depletion.³⁶²

Inasmuch as free condoms seem something more likely to be handed out at bars or parties rather than at farmers' markets, the rhetoric of the plague persists in both safer sex giveaways, linking the spectacular event of species extinction with that of death at a smaller scale in the context of the AIDS crisis. The difference between these two discourses lies in the transposition from the nonhuman deadly virus (and its human carriers implicated as infected agents of the plague) in HIV prevention, to the universally defined human subject reimagined as a waste-producing parasite whose reproducing capacities disease the planet. However, the claim to universality, inherited from the colonially induced "planetary consciousness," masks the unequal distribution of precarity and carbon-privilege among humans.

From the perspective of queer antirelational politics, by suggesting harnessing human reproduction for the sake of other species' capability to reproduce for survival, and without sacrificing sexual pleasure, the Endangered Species Condoms campaign might seem like an accurate response to the ideology of reproductive futurism. However, despite the intimate interconnections between reproduction and extinction in late-carbon capitalism, the matrimony of environmental politics (especially its strand concerned with population growth) with radical queer anti-social politics is unlikely due to different stakes in critiquing the reproductive dogma. From the vantage point of this troubled relationship, Neel Ahuja argues for queer ecologies tailored for the time of extinctions that depart from the spectacular temporality of crisis. He criticizes the catchall "ecological metaphors of the human as a universal waste-defined parasite," along with their merciful (and somewhat neoliberal) freedom from reproduction and carbon footprint calculation from the position of carbon privilege, and rather calls for an analysis where "the human remains a divided biopolitical assemblage connecting multiple species into unequal flows of energy and labor."³⁶³ For Ahuja, "*queering* in this sense emerges by tracing an affective materiality that interrupts anthropocentric body logics and space-time continuums

³⁶² "What Do Condoms Have to Do With Endangered Species?"

³⁶³ Ahuja, "Intimate Atmospheres Queer Theory in a Time of Extinctions," 376.

rather than a sovereign stance of negation in relation to Law, including the law of compulsory reproduction.”³⁶⁴ Queer theory tailored for the deep time of slow ecocide could help in overcoming the trauma of extinction and embracing alternatives to the normalizing understanding of reproduction and its futurities. What would this kind of queering look like when realized in the context of the zoo?

Given its investment in reproducing endangered species at the brink of extinction, the institution of the zoo inscribes perfectly in what Lauren Berlant calls “the genre of crisis.”³⁶⁵ The ecological apocalypse the zoo wants to address has been hailed the Anthropocene due to human-induced climate change and habitat loss.³⁶⁶ Species are disappearing from the face of the planet at an accelerating rate. In this state of emergency the zoo revised its role as the institution safeguarding planetary “biodiversity” – the environmental politics keyword for at least the past two decades. According to Berlant, the genre of crisis performs the work of “rhetorically turning an ongoing condition into an intensified situation in which extensive threats to survival are said to dominate the reproduction of life.”³⁶⁷ The imminent threat of the sixth mass extinction mobilizes the zoological machinery of breeding life into the future to alleviate the trauma of witnessing incomprehensible death at a species level. What kinds of longing and grief are involved in human desire to rescue certain species from extinction? What kinds of futures are imagined with biodiversity as an ultimate goal for zoos? Why, despite all the zoo’s future-oriented resources, every visit gives me shivers, makes me think of decay, death and melancholic extinction rather than a bright future and lively possibilities?

The requirement of making animal collections sustainable along with the principle of genetic diversity dictate the reproductive choices made in the zoo, with some animals bred into the future and some “bred for extinction.”³⁶⁸ The latter roughly translates into a spaying, neutering, or using pharmaceutical contraception to stop “genetically redundant” animals from breeding. While for Braverman, the practices of controlled death at the zoo point to the paradox of pastoral power that needs to kill in order to let live, I believe it also implicates the zoo as a space of

³⁶⁴ Ibid., 372.

³⁶⁵ Berlant, *Cruel Optimism*, 7.

³⁶⁶ See, Gibson, Rose, and Fincher, *Manifesto for Living in the Anthropocene*; Lorimer, *Wildlife in the Anthropocene. Conservation after Nature*.

³⁶⁷ Berlant, *Cruel Optimism*, 7.

³⁶⁸ Braverman, *Zooland*, 174.

longing. This longing is for a world that most probably will never exist. It is a desperate holding on to a moment in time that humans want to preserve forever. This longing embodies the fear of losing oneself. Futuristic projects of de-extinction, re-wilding, and cloning endangered species implicate reproduction as the key feature through which longing is dealt with in the zoo. Is it possible to grieve the loss of a whole species? Is loss on such a scale even possible to comprehend?

According to Mick Smith, the event of what he calls “the senseless extinction” – this pointless, irredeemable loss on the species level – marks the assembling of the ecological community. The loss is being materialized in a very tangible way as the absence of certain sensorial experiences. As he notices in his comparison between individual death and that of the whole species: “In terms of their (dis)*appearance* we miss the tangible evidence of their presence, looking expectantly for them in their accustomed places, catching scents that re-open memories, feeling only a void where once we held them tight.”³⁶⁹ Taxidermy preserves the possibility of at least catching the scents of the gone, touching their fur – the zoo produces similar permanence through reproducing rare animals’ bodies along with their sensory qualities. The zoo offers itself as a space of different types of remembrance: from the statues commemorating its well-known and beloved individual inhabitants to the chronobiopolitical enterprise of genetic remembrance at a species level. Could it be time to imagine another way of mourning? Could it be time to learn how to let go and how to stop forcefully (and selectively) trying to include others into the type of ecological community we want to have?

In Butler’s analysis of grief, one of the main challenges is “... to reconceive life itself as a set of largely unwilling interdependencies, even systemic relations, which imply that the ‘ontology’ of the human is not separable from the ‘ontology’ of the animal.”³⁷⁰ Similarly, Deborah Bird Rose calls for activating the “ethical time” for the era of Anthropocene, sustained through multispecies knots of interconnections.³⁷¹ How could these multispecies knots be braided into temporal schemes available for us in this time of extinctions? “Make kin not babies!” – Haraway proposes.³⁷² The zoo

³⁶⁹ Smith, “Ecological Community, the Sense of the World, and Senseless Extinction,” 23.

³⁷⁰ Butler, *Frames of War*, 76–77.

³⁷¹ Rose, “Multispecies Knots of Ethical Time.”

³⁷² She writes: “My purpose is to make ‘kin’ mean something other/more than entities tied by ancestry or genealogy. The gently defamiliarizing move might seem for a while to be just a mistake, but then

project puts reproduction, and by extension reproductive sexuality, as the cornerstone of species survival, and thus materializes temporality through genealogies, lineages, and familial-sentimental formations of species imagined as separate entities. Instead, time knotted in a multispecies manner works as a thick ecological network, a timespace that reaches beyond reproduction of kind. According to Thom van Doreen, “This is not about making time neat, flat, and singular. Rather, consciously inhabiting multiple, conflicting, and intersecting temporalities brings its own challenges and possibilities.”³⁷³ In the time of extinctions human reproduction is always implicated in the representations and ecologies of the Anthropocene, just like in the condom advertising I mentioned before. These interlaced human-animal ontologies further imbricate diverse racial, gendered, and sexual styles of subject composure. From this perspective queer zoo animals might be conceptualized as interruptions in the linear progressive temporality of natural history, as flickering manifestations of queer time, or simply as offshoots of human sexual categorizations complicit with current political narratives.

Into the Wildness

The information board about conservation efforts to save Sumatran tigers in the Toronto Zoo, with which I opened this chapter, was labeled with a misquoted sentence from Henry David Thoreau – the motto reads: “In wilderness lies the preservation of the world,” while the nineteenth-century poet originally used the word “wildness.”³⁷⁴ This substitution of a term that connotes a *quality* of being untamed, ferocious, savage, disorderly, with one that refers to a *space* where this state might occur, curbs the perverse possibilities offered by the semiotics of wildness – the interspecies tension this term contains, the open possibility of bewilderment, the feral fraction of nature, the dynamic temporal transgression. Instead, wilderness as a spatial term captivates zoo animals, and invokes them as wildlife inhabiting nature. In yet another iteration, as technologically induced “wild life,”³⁷⁵ zoo animals become mediums for preserving the world as we know it, and serve as tools in turning the tide of species death.

(with luck) appear as correct all along. Kin-making is making persons, not necessarily as individuals or as humans.” Haraway, “Anthropocene, Capitalocene, Plantationocene, Chthulucene,” 161.

³⁷³ Dooren, *Flight Ways*, 34.

³⁷⁴ Emerson and Thoreau, *Nature and Walking*, 95.

³⁷⁵ Clark, “Wild Life: Ferality and the Frontier with Chaos.”



Figure 3. Toronto Zoo (2013). Photo by author.

Strolling among the reminders of zoo pasts – its ancient labyrinths, vintage architecture, and colonial trophies – and its futures projected via the hi-tech machinery, like touch-screens, webcams, as well as transbiological technology mobilized to save the species slipping into oblivion of extinction, excavate the deeply buried death-driven aspects of the zoo-project. It uncovers its affinity toward decay and death – the taxidermic side of taxonomy. As Poliquin suggests:

Taxidermy exists because of life's inevitable trudge toward dissolution. Taxidermy wants to stop time. To keep life. To cherish what is no longer as if it were immortally whole. The desire to hold something back from this inevitable course and to savor its from *in perpetuum* exhibits a peculiar sort of desire.³⁷⁶

The zoo dwells on exactly this kind of desire in its complex relationship to temporality. Its inheritances and chronopolitics of life fueled by reproductive thinking are partially a death-driven enterprise. Inscribing into the tradition of queer negativity and critiques of reproductive principle, the logic of taxidermic taxonomies not only complicates the link between reproduction and extinction, but also illuminates sexual, gendered, and raced ecologies that grow out of the most contemporary zoological

³⁷⁶ Poliquin, *The Breathless Zoo*, 6.

interventions into the worldly ecosystems. With its affinity towards animalistic primitiveness as part of the colonial imaginary, wildness is a risky term to embrace, but one that opens towards queer temporality. This temporality of wildness is not an infinite blurry openness, but rather along the lines of how nature has been deployed in human politics in close affinity with sex and sexuality, it allows for re-conceptualizing reproduction and extinction beyond normativity.³⁷⁷

Time is running out for tigers. Time is running out for pandas. Time is running out for rhinos. Time is running out for turtles. Time ran out for Tasmanian tigers.

³⁷⁷ Rethinking “wildness” has already been on queer theory’s agenda with Muñoz and Tavia Nyong’o developing a project on queer potentiality of “the wild,” as reported by Halberstam in a tribute essay to Muñoz. Halberstam, “Wildness, Loss, Death.”

Part 2. Traffic in HumAnimals: Desiring Queer Animals

Animals help us tell stories about ourselves, especially when it comes to matters of sexuality.
– Jennifer Terry “Unnatural Acts in Nature”

At the meeting of the Royal Society of Arts in 1913, the secretary of the Zoological Society of London presented a paper on zoological gardens, where he argued:

It is not the perverted taste of those who like to see wild and presumably ferocious animals raging behind bars, nor the thoughtless cruelty of those who like to see them performing unnatural and silly tricks, nor the cold indifference of those who regard them merely as the raw material for anatomy and physiology, or as the counters in systematic arrangement. It is the desire to see them alive, healthy and active in normal ways, displaying the lightness and swift activity of motion and the splendour and harmony of form and colour.³⁷⁸

It seems that for the author of these words, the desire to watch wild animals in captivity is not a neutral one, but rather falls under various categories that he ranks according to their normativity: perverted taste for exhibiting dangerous beasts, unnatural craving for circus-like tricks, calculated indifference of anatomists, physiologists, and systematists, and finally the seemingly natural admiration of animal form, motion, and harmony that should fuel the zoological enterprise and foster citizens’ engagement with it.

This short excerpt, saturated with affective description, also serves as a signpost not only for situating the zoo in relation to other forms of exhibiting wildlife, but as a moral compass showing the appropriate way of channeling desire for encountering nature. In delineating the genealogy of the zoo apart from the formative differentiation from its predecessors –the crux of the previous section – other institutions specializing in exhibiting natural phenomena appear on the horizon as important points of reference. However, the specific character and value of these points differs, providing different coordinates, through which the modern zoo was conceptually conceived. For Lynn K. Nyhart, the rise of the biological perspective embodied in natural history discourses and practice finds its locus in the civic realm

³⁷⁸ Chalmers Mitchell, “Zoological Gardens,” 26.

of various institutions, “because the same people (who) developed ideas for zoo displays often worked on museum displays as well, the aesthetic vocabulary readily travelled between the two forms of representation.”³⁷⁹ While museums and zoos share similar scientific aspirations and educational goals, circuses and the freak shows until today are presented as anti-models for the zoo, even though they also served as venues for lay medical practitioners. Despite their shared stakes in the animal spectacle, the zoo was established as the new civic institution that was supposed to rely more on science, providing moral education and healthy recreation. These factors and differentiations contribute to the “proper” ways of channeling various desires that might arise in encountering wild animals. What then can be said of the desire for learning lessons about sexuality and gender in the zoo?

As I have evidenced in the first section, the issues of sexuality and gender have been a part of the zoo project since its inception. However, more recent interest in non-normative sexual behavior in animal species and specific cases of “queer zoo animals” that became the raw material for human identity politics are the focus of this section. What is the place of nonhuman animals in the queer project? In search for the “missing links” of queer posthumanist discourses, some nonhuman animals play a crucial role in setting up new possible ontologies and politics of sexual diversity. The desire to trace “natural” evidence for sexual diversity and a non-binary gender system that goes beyond the simplistic “social constructionism” vs. “biological essentialism” dichotomy in the nonhuman world should be critically examined. The stories of particular nonhuman animals that I analyze in the following chapters form a sample of the various types of this kind of desire expressed by scientists, queer communities, national actors, and zoo visitors. Perverted or healthy, unnatural or natural, both political and ontological desire for queer animals is inscribed into the zoological spectacle of nature.

³⁷⁹ Nyhart, *Modern Nature*, 81.

Chapter 4. Penguins and Captive Sexualities

Anyone who doesn't realize that the intimate details of penguin family life are a hot political topic must have spent the last couple of years on an ice floe.

– Marlene Zuk (2006)

If there's one thing, however, that the King Penguins seem to love to do it is to lead the observer on with a succession of data, apparently consistent and reliable, until he succumbs to the temptation to base a theory upon them, and to upset all the conclusions that their previous behaviour had seemed to warrant.

– Thomas Gillespie (1932)

News about a small-scale transfer of two penguins between German zoos might not seem like headline grabbing news. However, a pair of male King penguins (*Aptenodytes patagonicus*) named Stan and Olli were moved in 2016 from the Berlin Zoo to Hagenbeck's Zoo in Hamburg for a specific reason: they were being removed from the penguin breeding project, part of the European Endangered Species Programme (EEP), because they strayed from reproductive behavior. "They're gay, as far as we know," explains Berlin Zoo's spokeswoman Christiane Reiss, "They never bred. And when it came to courtship, they only mated with one another."³⁸⁰ The story hit the headlines of local and international media outlets with titles such as: "Gay penguins left in peace after breeding plans stall," "Two gay King penguins are being moved to Hamburg so they can stay together," or "Zookeepers wanted these gay penguins to breed with females, but they only had eyes for each other."³⁸¹

This is not the first time a same-sex penguin couple attracted significant media attention in Germany. In 2005 the Bremerhaven Zoo came under attack by gay rights activists, after announcing plans to import four female Humboldt penguins (*Spheniscus humboldti*) from Sweden to encourage breeding by their six males, which were discovered to be same-sex paired. The outraged local gay community accused

³⁸⁰ "Gay Penguins Left in Peace after Breeding Plans Stall - The Local."

³⁸¹ Ibid.; "Two Gay Penguins Have Been Moved to a New Zoo so They Can Be Together"; "Zookeepers Wanted These Gay Penguins to Breed with Females, but They Only Had Eyes for Eachother."

the zoo of interfering with the animals' natural behavior by bringing in Swedish "tempresses" with a mission to "seduce" "gay" penguins and "turn them straight,"³⁸² a strategy satirically playing off the anthropomorphized romance trope usually rehearsed in the zoo along "straight" lines. After failed attempts to "break up" the homosexual penguin couples, the zoo shifted their policy towards non-reproductive individuals, and in 2009 supported male penguins' parenting behavior, as they were repeatedly observed trying to hatch rocks. Two male penguins named Z and Vielpunkt were given an egg rejected by its biological parents, and in result they managed to successfully rear a chick. In this turn of events, the zoo and media portrayed the penguins as "happy foster parents" and "proud fathers ... absolutely accepted by the rest of the penguins."³⁸³ In an official statement the zoo claimed that, "since the chick arrived, they have been behaving just as you would expect a heterosexual couple to do."³⁸⁴

From the perspective of the modern zoo – an institution devoted to reproducing endangered species – the recent decision to let Stan and Olli off the breeding hook and embrace their clearly anthropomorphized gay identity seems like an inconsistency in the zoo's conservation priorities. Shouldn't the zoo try to maximize breeding of endangered species at all costs? However, unlike the Humboldt penguins (Z and Vielpunkt), King penguins (Stan and Olli) are not an endangered species they are categorized under the Least Concern rubric by the International Union for Conservation of Nature, a category also including humans. Despite not being a critical priority from the point of view of endangerment, King penguins are commonly recognized as a flagship species, a charismatic fauna that serves as a symbol for wildlife conservation campaigns and stimulates awareness by arousing public interest and sympathy.³⁸⁵ A photograph of a colony of these elegant birds is even featured on the webpage of the European Association of Zoos and Aquariums.³⁸⁶ However, given the proliferation of "gay penguin" stories, it seems like the adorable tuxedo-wearing birds also became a flagship species for gay rights. Ironically, around the same time when penguins became iconic for various LGBT/queer movements, the same animal totem was endorsed as a symbol of traditional family values by right-

³⁸² "Gay Penguins Rearing Chick in German Zoo."

³⁸³ "Zoo Hails Gay Penguin Couple as Foster Parents."

³⁸⁴ "Male Penguins Raise Adopted Chick."

³⁸⁵ Courchamp, Luque, and Ducarme, "What Are 'charismatic Species' for Conservation Biologists? — Département de Biologie."

³⁸⁶ "About Us » EAZA."

wing fundamentalist Christians in the U.S. after the commercial success of *March of the Penguins* (2005), a wildlife documentary featuring the majestic Emperor penguins (*Aptenodytes forsteri*) in their heroic efforts to reproduce and survive in the harsh conditions of the Antarctic.³⁸⁷ Conservative film critic Michael Medved claimed in an interview that this wildlife film “most passionately affirms traditional norms like monogamy, sacrifice and child rearing,” and even declared the movie the “Passion of the Penguins,” in reference to Mel Gibson’s blockbuster *Passion of Christ*.³⁸⁸

With reported cases of penguin homosexual bonding in zoos across the globe – from Germany, Canada, Japan, the U.S., China, the United Kingdom, Israel, and many others – these wobbling celebrities can now get married and even adopt eggs to hatch in several zoos and aquariums. This anthropomorphizing approach has a long tradition in the zoo, which specializes in producing “naturalized” accounts of sexuality through representations of nonhuman animals, as I describe in more detail throughout Section 1. Within the framework of *traffic in HumAnimals*, I investigate the broad discursive field that has emerged around recent cases of “homosexual/gay/queer” zoo penguins. My materials involve Internet-based representations and reports, cinematic and literary representations, as well as scientific articles on penguin ethology. This chapter is structured as a comparison between two types of discourses on penguins and their sexuality: popular media representations and zoo practices. I argue that both of these discourses are highly political.

In mapping out the trajectories of penguin love sagas along with their investments in competing human political agendas, I wonder about the specific role the zoo plays in delineating different genealogies of these stories, as well as in ascribing distinct values to nonhuman sexual practices. Apart from the rather obvious tactic of naturalizing certain sexual practices through representing animals as justifications of human actions, how does the category of endangerment play out in zoological sexual politics? Why has the global phenomenon of gay penguins and their rainbow families emerged in the context of the zoo, being primarily an institution of captivity? How does the timing of the emergence of “the homosexual penguin” as a species, to paraphrase a famous statement by Foucault,³⁸⁹ relate to specifically situated political struggles over sexual identity and LGBTQ rights globally and in

³⁸⁷ Jacquet, *March of the Penguins*.

³⁸⁸ Miller, “March of the Conservatives.”

³⁸⁹ Foucault, *The History of Sexuality*, 1990, 43.

their respective socio-national contexts? What are the material stakes in the traffic in penguins between zoos, especially in light of accommodating newly gained sexual identity of nonbreeding penguins within Species Survival Plans?

The traffic in HumAnimals allows for tracing the complex trajectories of these multilayered discourses across species boundaries (between the King, Humboldt, Emperor, Chinstrap, and Adélie penguins and humans), national borders, affective entanglements, and the geopolitically specific meanings into which these cases of animal queerness are translated. Such traffic constitutes both the material movement of penguin bodies between zoos for breeding, or their skins from the field to scientific institutions, but also the discursive transfer in meanings: from human to nonhuman and the other way around, between different geo-political contexts. In this sense, the subchapters that follow (family, gay, lesbian, pink-washed, and hooligan penguins) should be treated not as taxonomic categorizations, but rather as coordinates in the traffic in HumAnimals. This traffic complicates well-established scientific ideas about penguin sexual behavior. Penguins crafted into living symbols of monogamous love and devotion become indicators of conflicting family values – the battleground for traditional and rainbow familial orientations. Human investment in specific storylines on penguin affection unearths the complexity and fragility of arguments to nature; nonhuman animals constitute extremely slippery mediums, as they do not always stick to the script envisioned by humans.

Although it seems tempting to search for “natural” origins of human practices by looking at other animals, it is also crucial to carefully follow both the main drifts steering the traffic in HumAnimals, as well as its undercurrents. I am particularly interested in three aspects that the concept of queer animalities offers: the shifting ontological formations carried along with tales of penguin queerness, the epistemological conditions that shape such stories, and their political currencies. The zoo became a site where politics of recognition, identity formation, and normativity are sculpted with nonhuman animal tokens in the spotlight, taking the stage in the spectacle of negotiating the boundaries of the evanescent and volatile human sexual self and its political desires.

Family Penguins

Emperor penguins are the largest and tallest species in the penguin family. With bright yellow plumage around their slender necks and an upright position they take on a dignified appearance that seems to predestine them for fame.

Please sit back and listen to Morgan Freeman’s deep, calming voice as he narrates the story of the Emperor penguins’ annual migration from the ocean to the inhospitable Antarctic inland: “There is a mysterious ritual that dates back thousands of years. No living creature has survived it, except from the penguin. ... In the harshest place on Earth, love finds a way. This is the incredible true story of a family’s journey to bring life into the world.”³⁹⁰ This exalted voiceover is an essential part of the huge commercial success of the French award-winning wildlife documentary *March of the Penguins* (2005). Most surprisingly to the creators, its American release by National Geographic Feature Films and Warner Independent Pictures was especially well received by right-wing Christian evangelicals, who welcomed this family edutainment as positively illustrating traditional values such as monogamy, childrearing, and sacrifice, and even as corresponding with intelligent design theory, for the narration presupposes some mysterious innate instinct driving the birds to undertake such a dangerous trek in the brutal icy landscape. The mobilization of conservative viewers around the film was unprecedented. Rich Lowry, the editor of a conservative magazine urged students to watch the film: “It is an amazing movie. And I have to say, penguins are the really ideal example of monogamy.”³⁹¹

The combination of the protagonists – represented as dignified birds primed for anthropomorphization within the economy of cuteness – and the arduous environment they have to thrive through with one aim, that is to reproduce, provides perfect material for another sentimental melodrama. Indeed, this big-screen wildlife documentary clearly takes after typical features of the genre by framing the reproductive cycle of penguins as a love story. Elisabeth Leane and Stephanie Pfenningwerth identify this blueprint as typical for Disney’s early wildlife documentaries from the 1940s and 1950s. They write: “In this model the narrative is organised around the natural rhythms of the wild: the age-old, ‘eternal’ cycle of

³⁹⁰ Jacquet, *March of the Penguins*.

³⁹¹ Miller, “March of the Conservatives.”

courtship, mating (although explicit sexual acts are rarely shown), the birth and rearing of the young, the annual migration.”³⁹² More importantly, in its heroic portrayal of the penguins’ journey to lay and hatch their eggs in spite of the severe weather conditions of the Antarctic winter as a story of survival, resilience, and sacrifice, it cements the reproductive drive as the most natural (almost divine) biological mechanism. At the same time it naturalizes human forms of social organization, such as the family unit and the monogamous heterosexual couple.

Whether interpreted within the framework of compulsory heterosexuality, intelligent design, or survival of the fittest, *March of the Penguins* was pitched towards specific audiences – those who could easily relate to the struggle of the clumsy birds to make it through harsh times and obliterating cold. Penguins seem to be perfectly suited for this kind of story; a breeding pair usually produces one egg and this small unit presents an uncanny similarity to the “two plus one” nuclear family model. However, the overwhelming success behind the film lies in the fact that its story is quite simple and versatile. Jacquet, the director, said in an interview: “My intention was to tell the story in the most simple and profound way and to leave it open to any reading.”³⁹³ This openness left enough room for various interpretations. Blinding snow blizzards and sacrifices to provide for the family can be read as almost prophetic metaphors for the precarity and economic hardships under unfavorable conditions of the neoliberal capitalist winter. But they can also be compared with any other external, challenging circumstances. For example, a Christian minister interprets the film along the lines of his strong religious identity: “Some of the circumstances they experienced seemed to parallel those of Christians. The penguin is falling behind, is like some Christians falling behind. The path changes every year, yet they find their way, is like the Holy Spirit.”³⁹⁴ In this way, the long tradition of sentimentalizing nature and of moralizing stories utilizing animal life as a referent is continued in the *March of the Penguins*. As Haraway notes, moral lessons drawn from encounters with wildlife are fundamental for spaces like the natural history museums, or zoos, with their narratives focused on the family: “Nature’s biographical unit, the reproductive group had the moral and epistemological status of truth-tellers.”³⁹⁵ Whereas many analyses of the film, contextualizing competing interpretations of “penguin family

³⁹² Leane and Pfennigwerth, “Marching on Thin Ice: The Politics of Penguin Films,” 31–32.

³⁹³ Miller, “March of the Conservatives.”

³⁹⁴ Ibid.

³⁹⁵ Haraway, *Primate Visions*, 41.

values,” try to pinpoint the features that make this picture so appealing for the fundamentalist Christians, I rather closely investigate the subtle process of fitting penguinness into the familial scheme with a male reproductive drive.³⁹⁶

The film centers male penguins in its narrative by actively focusing on fatherhood. Fathers take the first turn in incubating eggs by balancing them atop their feet and sheltering the precious cargo under their brood pouches from freezing cold. Meanwhile, females return to the sea to forage after exhausting their nutritional reserves to lay the eggs. It is the fathers who hatch the eggs in an almost-miraculous male birth giving and provide the first meal for a few-days-old chicks despite their own starvation. As Roger Lancaster points out, “nature grants a grudging equality between the sexes, but only in the context of a cozy, heterosexual-pair-based family, and with much gratuitous finger wagging at welfare mothers who refuse to depend on a male breadwinner.”³⁹⁷ Noel Sturgeon suggests that although at the first glance this penguin division of labor seems in contradiction with traditional values championed by the film’s “surprise fan base,” the heroic portrayal of penguin fathers caring for their offspring and risking their lives for species survival make them models of the patriarchal family structure. She writes:

The female penguins in the movie, though also sacrificing their health and well-being for their babies, somehow aren’t as moving in their long arduous walk as the huddled mass of penguin dads toughing it out together through the Arctic night; neither is the females’ equally long wait for the males to return an important part of the narrative.³⁹⁸

The peculiar marginalization of female penguins in the narrative on the species’ reproductive cycle is not the only daring absence in the *March of the Penguins*. Halberstam notes that by favoring the almost “pornographic” spectacle of heterosexual reproduction, the narrative of the film shows only a fraction of the story, leaving out the parts that do not fit the scheme of the nuclear family unit. For example, non-reproductive penguins never appear in the film’s narrative, although

³⁹⁶ For an analysis of the film’s careful language avoiding the terms associated with evolutionary theory, and instead suggesting a transcendental narrative of one penguin family’s struggle, see: Chris, *Watching Wildlife*, 205–6; Halberstam offers a critique of the film’s anthropomorphism and leaving out of any alternative storyline that would in any way engage with “the penguin logic.” Halberstam also compares the film with several animated productions on penguins. See, Halberstam, “Animating Revolt/Revolting Animation.” For a discussion on the intersection of environmental concerns and reproductive justice issues combined in an “environmental reproductive justice” see: Sturgeon, “Penguin Family Values.”

³⁹⁷ Lancaster, *Trouble with Nature*, 44.

³⁹⁸ Sturgeon, “Penguin Family Values,” 110.

they also undertake the dangerous journey to the icy breeding grounds. The fact that penguins mate with the same partner only for one year is only mentioned in passing. “And so the narrative goes,” – Halberstam writes, – “ascribing stigma and envy to non-reproductive penguins, sacrifice and a Protestant work ethic to the reproducers and always seeing capitalist hetero-reproductive-family rather than the larger group.”³⁹⁹ Halberstam even envisions a possible parallel storyline that would focus more on cooperation, collectivity, and affiliation, and include non-heterosexual, non-reproductive behavior as part of the penguin huddle collective will.

As scholars researching this genre illustrate, wildlife documentaries are premised on constructing a compelling storyline, which by default leaves out certain aspects of animal behavior in favor of others.⁴⁰⁰ Reading through these exclusions helps in making the political stakes in telling stories of nature more visible. Zoological displays have been invested in creating such storylines about animal lives for at least three centuries, and certain characteristics of a given species can even be coded in the zoo infrastructure. Consider the modernist zoo architecture focused on capturing the essence of the animal form and being. A prime example of this is the famous Penguin Pool built at the London Zoo in 1934, designed by Berthold Lubetkin of the Tecton firm. According to Prys Gruffudd, zoological projects commissioned from this architecture company “were biological cultivation in essential form, stripping away layers of culture and treating the animal organism as a series of characteristics and desires.”⁴⁰¹ The Penguin Pool, for example, was comprised of two spiral ramps that crossed each other into a helix shape before ascending into a shallow oval pool. This minimalistic and elegantly geometric structure, sculpted in white concrete, was inspired by an egg – a basic and mystical element of nature and scientific evolution, chosen here to define penguin being. Just as other Tecton designs, this was also informed by intensive research of species-specific behavior, habits, and needs, in order to create an aesthetic structure (a clean design exposing penguins to the human audience) combined with biological functionality (built-in nesting boxes hidden from the public view). It resulted in accentuating specific penguin qualities, thoroughly sedimented through human perception of what constitutes a creature such as the penguin. As Gruffudd puts it:

³⁹⁹ Halberstam, “Animating Revolt/Revolting Animation,” 270.

⁴⁰⁰ Mitman, *Reel Nature*; Chris, *Watching Wildlife*; King, “The Audience in the Wilderness”; Wilson, *The Culture of Nature*.

⁴⁰¹ Gruffudd, “Biological Cultivation Lubetkin’s Modernism at London Zoo in the 1930s,” 227.

That sense of theatricality implied by human intervention in the natural world through zoos was also heavily to the fore here. This was a building in which ‘penguinness’ was produced. In the water the penguins could demonstrate their natural grace and speed. The ramps and walkways, however, provided the comical contrast.⁴⁰²

This production of “penguinness” through architecture is crucial for how the zoo captivates nonhuman ontology and enhances its defining features, only to project it back onto human desires and phantasies. However, even a hygienically controlled environment, created with sleek, minimalist modernist design is still capable of conveying basic elements necessary for reproducing a heteronormative narrative. Gruffudd quotes the architecture critic C.H. Reilly, who implants himself into the futuristic penguin world along this storyline: “I hope I live long enough to have a small town house, I suppose with one ramp for my wife and another for myself as circumscribed, and complete for my needs and with no possible addition or alteration—indeed the perfect unity.”⁴⁰³ The geometrical elegance offered by the double helix construction of the Penguin Pool gets easily translated into the gender binary and complementarity of the sexes as a universal, mathematical perfection surpassing species boundaries.

In this sense, both zoological exhibitions and wildlife films shape the spectacle of nature, drawing from human longing for an authentic experience of wilderness as an ideal natural form, or, for natural legitimacy, and thereby molding this raw, primordial material into a digestible, coherent story of love, survival, the overcoming of hardships, and of enjoying family life. These are always just fragmentary representations, framing human vision of the natural world through the limited zoo display or the camera lens, thus becoming a prism for human ideological investments that utilize nature and shape the audiences’ perceptions of its organization. Chris notes that in the wildlife documentary, these investments often remain transparent, almost invisible as self-referential:

The wildlife genre in particular, and the extra-media discourses that inform it, are sites of both purposeful ideological work and unconscious elaboration of beliefs so normalized as common sense— about nature, animals, race, gender, sexuality, economic and political formations—that they may not be recognized (by filmmakers, by television programmers, by scientists, by audiences) as ideological.⁴⁰⁴

⁴⁰² Ibid., 230.

⁴⁰³ Reilly, “Ms. of Article to Architects Journal.” (as cited in Gruffudd 2000).

⁴⁰⁴ Chris, *Watching Wildlife*, xix.

The dilemma of interpreting nature in a certain way, which is always inflected by human biases, stereotypes, and cultural patterns, can be extended from the cinematic, or zoo exhibition representations, to scientific inquiry, especially if it is approached as yet another form of storytelling coming from a situated and embodied partial perspective of the narrator.⁴⁰⁵ For example, I imagine that Peter Kropotkin's *Mutual Aid* (1890–96) might inform an alternative version of *March of the Penguins*, with more focus on “the huddle” as the anarchist prince lays out his counterarguments to the fixation on the survival of the fittest within evolutionary theory. In fact, Kropotkin was inspired by his travels in Siberia, where according to his observations, the harsh climate conditions push animals of the same and different species to cooperate, rather than to compete for survival. He writes:

I recollect myself the impression produced upon me by the animal world of Siberia, when I explored the Vitim regions on the company of so accomplished a zoologist as my friend Polyakoff was. We were both under the fresh impression of the *Origin of the Species*, but we vainly looked for the keen competition between animals of the same species which the reading of Darwin's work had prepared us to expect We saw plenty of adaptations for struggling, very often in common, against the adverse circumstances of climate, or against various enemies, and Polyakoff wrote many a good page upon the mutual dependency of carnivores, ruminants, and rodents in their geographical distribution; we witnessed numbers of facts of mutual support⁴⁰⁶

Inasmuch as Halberstam would probably welcome this framing as supporting his argument that “the homo or non-repro penguins are totally necessary to the temporary reproductive unit,”⁴⁰⁷ it also inscribes well into reductionist sociobiological explanations of homosexuality. From an orthodox evolutionist perspective informed by genetic determinism, homosexuality forms a paradox – homosexual animals are believed not to pass their genes to future generations.⁴⁰⁸ Sociobiological explanations of the widespread occurrences of same-sex behavior in animals in the wild point towards reproductive altruism, cooperative breeding, or the so-called “reproductive skew” theory, according to which non-breeding animals contribute to the reproductive success of their kin – the carriers of their genetic heritage.⁴⁰⁹ However, “one cannot be

⁴⁰⁵ See, Haraway, “Situated Knowledges,” 1988.

⁴⁰⁶ Kropotkin, *Mutual Aid*, 9.

⁴⁰⁷ Halberstam, “Animating Revolt/Revolting Animation,” 270.

⁴⁰⁸ Weinrich, “A New Sociobiological Theory of Homosexuality Applicable to Societies with Universal Marriage.”

⁴⁰⁹ Poiani, *Animal Homosexuality*, 323–33.

both queer and a sociobiologist,⁴¹⁰ as Vinciane Despret points out. What she means by that is this there is a contradiction between sociobiological explanations of homosexuality, which strive for an all-encompassing theory based upon a limiting conception of sexuality, flattening out the differences, and queer explanations, which celebrate difference, irregularities, and anomalies to refuse the naturalization of homosexual identity as an act of “political will.”⁴¹¹

Around the time when *March of the Penguins* was being celebrated by the Christian right in the U.S., another penguin phenomenon surfaced in public discourse, potentially sabotaging the perfect family picture featured in the film. In several zoos across the world, same-sex penguin couples were observed and brought to public attention. With relatively high media coverage, the global “gay penguin” phenomenon was born. In 2005, a children’s book titled *And Tango Makes Three*, based on a true story of two male Chinstrap penguins (*Pygoscelis antarctica*) hatching an orphaned egg and raising the chick together at the Central Park Zoo in New York was published in an atmosphere of controversy.⁴¹² According to the American Library Association, *And Tango Makes Three* was the top most challenged book from 2006 until 2010 (except from 2009 when it came in second). Perceived by many as “gay propaganda,” the book was removed or restricted from school curricula and library bookshelves.⁴¹³ However, the massive conservative outrage over a children’s story about penguin foster fathers, which does not even mention the word “gay,” might have been a pointless indignation, as this story paints a mirror-image nuclear family, only with two dads.

Amidst an explosion of family-friendly penguin animated films like *Happy Feet* (2006)⁴¹⁴ and *Surf’s Up* (2007),⁴¹⁵ penguin “gay parenthood,” widely practiced in zoos across the world, became a prominent point of reference in cultural battles over the proper gender composition of the family, as well as the naturalness of homosexuality and heterosexuality. Ironically, both conservative and liberal discourses share a strong insistence on monogamous marriage and male agency in

⁴¹⁰ Despret, “Animal Abecedary,” 144.

⁴¹¹ Ibid.

⁴¹² Richardson and Parnell, *And Tango Makes Three*.

⁴¹³ Morales and Petersen, “Attempts to Remove Children’s Book on Male Penguin Couple Parenting Chick Continue.”

⁴¹⁴ Miller, Coleman, and Morris, *Happy Feet*.

⁴¹⁵ Brannon and Buck, *Surf’s Up*.

childrearing, revealing an elaborate regulatory apparatus in charge of any kind of sexual practices.⁴¹⁶ Shifts, fluctuations, and ideological tensions within those narratives are symptomatic of a crisis in the institution of the family under the conditions of neoliberal capitalism and sweeping cultural revolutions redefining its function and structure. In this sense, it is also possible to isolate clear patterns within the busy traffic in HumAnimals, which in the case of penguins, reveal their symbolic value as role models for human postmodern kinship formations.

Gay Penguins

The true story behind *And Tango Makes Three* (2005) features Roy and Silo, the two most prominent penguin celebrities in the global phenomenon of “gay penguinness.” Although mating rituals between these two zoo-dwellers were observed already in 1998, their love story hit headlines when after almost six years of devoted bonding and some attempts at incubating stones, zookeepers decided to entrust them with a fertilized egg to hatch. Once these two penguins formed a proper family, they became the perfect material for tongue-in-cheek light content news at a time when debates on gay marriage and gay adoption rights were raging in the U.S.

The 2004, a *New York Times*’ article titled, “Love That Dare Not Squeak Its Name” presents the penguins as a devoted couple in a stable monogamous union: “For nearly six years now, they have been inseparable. They exhibit what in penguin parlance is called ‘ecstatic behavior’: that is, they entwine their necks, they vocalize to each other, they have sex. ... When offered female companionship, they have adamantly refused it.”⁴¹⁷ This portrayal of animal sexuality parallels a common strategy employed by the Equal Marriage Movement in the U.S. by major advocacy groups, building their narratives around an idealized same-sex couple “deserving” the right to marry. For example, this is how the Human Rights Campaign (the largest LGBT rights advocacy group in the U.S.) responds to the question of why same-sex couples want to marry:

Many same-sex couples want the right to legally marry because they are in love — many, in fact, have spent the last 10, 20 or 50 years with that person — and they want to honor their

⁴¹⁶ For a feminist analysis of the concept of monogamy in U.S. science and culture see: Willey, *Undoing Monogamy*.

⁴¹⁷ Smith, “Love That Dare Not Squeak Its Name.”

relationship in the greatest way our society has to offer, by making a public commitment to stand together in good times and bad, through all the joys and challenges family life brings.⁴¹⁸

The defining features of a “deserving” same-sex couple are: being in love, forming a devoted long-term relationship, and striving for a family. The penguins seem to have it all.

Once Roy and Silo resisted the temptations of heterosexual courtship, proved to be faithful to each other, and acted as good fathers to their “adopted” child Tango, they were cast as models for human sexual politics. And yet, this penguin saga that touched the hearts of New Yorkers continued with more twists and turns. As *The New York Times* reported in 2004, “Silo’s eye began to wander, and last spring he forsook his partner of six years at the Central Park Zoo and took up with a female from California named Scrappy.”⁴¹⁹ This sudden break up led “Focus on the Family,” a conservative organization advocating conversion therapy and an outspoken adversaries of *And Tango Makes Three*, to embrace Silo as an “ex-gay” penguin.⁴²⁰ In the meantime, his daughter Tango was observed to pair up with another female penguin named Tanuzi.⁴²¹ Although this “soap opera world of seduction and intrigue”⁴²² set in the zoo, full “of betrayal, sexual identity and penguin lust”⁴²³ kept the public electrified for a time and animated public debates on sexuality, its coverage and interpretations open up many questions: What exactly makes a penguin “gay”? Can same-sex sexual behavior in the penguin world serve as proof for the innateness and naturalness of homosexuality? Or rather, does Tango’s behavior evidence the learned and transmittable character of same-sex coupling in penguins? Can these observations be further extrapolated onto other animals? Why has Silo not been categorized as a “bisexual” rather than “gay” penguin? Could Roy have been a “trans” penguin all along? More generally, what are the consequences of drawing conclusions on sexuality and gender from nonhuman animals?

Roy and Silo were neither the first nor the last same-sex penguin couple observed in captivity. Same sex bonding has been reported from the beginnings of zoological penguins keeping in the nineteenth century. More recently, the Central

⁴¹⁸ “Answers to Questions About Marriage Equality,” 3.

⁴¹⁹ Miller, “New Love Breaks Up a 6-Year Relationship at the Zoo.”

⁴²⁰ Shepard, “And Tango Makes Activism.”

⁴²¹ Bone, “Gay Icon Causes a Flap by Picking up a Female.”

⁴²² Cardoze, “They’re in Love. They’re Gay. They’re Penguins... And They’re Not Alone.”

⁴²³ Miller, “New Love Breaks Up a 6-Year Relationship at the Zoo.”

Park Zoo confirmed that two female Gentoo penguins (*Pygoscelis papua*) paired up before, and the New York Aquarium in Coney Island housed Wendell and Cass, another pair of male African penguins (*Spheniscus demersus*) in 2002.⁴²⁴ However, it seems like the necessary factors for creating a “real” gay penguin story are two male birds with a strong reproductive drive. Soon thereafter, other zoos and aquariums followed these strategies and foster penguin families became an unwritten standard in zoo practice. In 2011, two male penguins in the Harbin Polar Land aquarium in China were reported to steal eggs from reproductive couples, so the zoo officials gave them a chick to bring up.⁴²⁵ In 2012, zookeepers from Madrid’s Faunia Nature Park placed an egg in the nest of two male Gentoo penguins.⁴²⁶ In 2014, Jumbs and Kermit, two Humboldt penguins in Wingham Wildlife Park in Kent, became adoptive fathers.⁴²⁷ The discourses on gay penguins in zoos necessarily describe them as striving to become parents, implanting a strong reproductive drive to queer nonhumans – a trait that conveniently counterbalances the arguments on the non-evolutionary, or genetically unsustainable character (with an implied claim to unnaturalness) of animal homosexual behavior.

The issue of reproduction is key for the zoo, which apart from serving as a popular entertainment venue, highlights its mission in endangered species conservation discussed above. In this context, the fecund and capacious category of endangerment can simultaneously function on several levels, depending on the perspective: on the one hand, gay rights activists perceived “gay” penguins as endangered due to zoo staff’s attempts to breed them (“force them to go straight”⁴²⁸), while on the other, some of the penguins belong to species classified as endangered with extinction. Who is endangered? Penguins as a species, or same-sex coupled penguins as performing anthropomorphized sexual identity? For example, in 2011, Buddy and Pedro, two male African penguins that pair-bonded for several seasons, were separated in the Toronto Zoo to breed with designated females as part of the realization of zoo’s Species Survival Plan.⁴²⁹ Zoo officials had to reassure the

⁴²⁴ Smith, “Love That Dare Not Squeak Its Name”; Bull, “Birds of a Feather.”

⁴²⁵ “Gay Male Penguins Become Adoptive Parents in Harbin”; Gray, “Chinese Zookeepers Give Gay Penguin Couple a Chick.”

⁴²⁶ Broch, “Gay Penguin Couple given Their Own Egg to Rear.”

⁴²⁷ “Kent Zoo: Gay Penguin Couple Are ‘better Parents’ than Straight Penguins.”

⁴²⁸ Hartmann, “Gay Penguin Couple Forced To Go Straight.”

⁴²⁹ Donovan, “Same-Sex Penguin Pair Fascinates Zookeepers.”

concerned local gay community that this intervention was only temporary, and the couple would be reunited after fulfilling their duty to species survival.⁴³⁰ In yet another iteration of how endangerment can be used politically, the cinematic representation of penguins striving to reproduce and care for their offspring in *March of the Penguins* allows for re-imagining the institution of the traditional family as a fragile entity constantly endangered by external forces (predators, harsh weather conditions, thin ice, etc.). And in the later development of penguin fandom, this reproductive striving is also used by the sexual rights movement in the defense of the plights of gay penguins. None of these positions is innocent or value-neutral, even if channeled through parodic textual or visual representations.

Zoo spectatorship, which according to several scholars is inherently voyeuristic,⁴³¹ largely contributes to the prominence of gay penguin stories that emulate human pulp fiction dramas with forbidden romance, faithful lovers, foreign seductresses, home wreckers, impossible desires, and happy endings. Susan Talburt and Claudia Matus have analyzed the abundant media discourses on gay penguins in China, Germany, and the U.S., and found clear patterns in the ways these narratives have been constructed.⁴³² The authors have identified a particular discursive chain that drive these narratives, and, cutting across several divisions they draw from, produce “the homonormativized gay penguin as another site that justifies the evaluation, regulation, and granting of rights based on stable sexualities and appropriate behaviors.”⁴³³ This sequential chain starts with a penguin “coming out” story usually unveiled by zookeepers, who identify a particular penguin couple as homosexual, based on courtship behavior typical for heterosexual penguins during their mating season and the lack of visible reproductive cues (eggs). It is important to add that sexual dimorphism in penguins is not explicitly visible – unlike many birds, their plumage is exactly the same, and they are sexed according to size, which is a rather fluid variable.⁴³⁴ Usually, in the zoo, DNA testing from feather, blood, or egg

⁴³⁰ Gray, “Canada’s Gay Penguins to Be ‘reunited by Spring.’”

⁴³¹ See, Malamud, *Reading Zoos*; Acampora, “Zoos and Eyes.”

⁴³² Talburt and Matus, “Orienting Ourselves to the Gay Penguin.”

⁴³³ *Ibid.*, 43.

⁴³⁴ Ainley and Emison, “Sexual Size Dimorphism in Adelle Penguins”; Poisbleau et al., “Sexual Dimorphism and Use of Morphological Measurements to Sex Adults, Immatures and Chicks of Rockhopper Penguins.”

membrane samples confirms the sex of the penguins, making science a necessary step in identifying same-sex pairs.⁴³⁵

Later, as Talburt and Matus argue, that “outing” triggers a sequence of narratives on true love, commitment, and devotion. Gay penguin pairs are presented as long-lasting, stable partnerships in contrast to serially monogamous “straight” penguins bonding for one season only. The next step is the “natural” urge to procreate, evidenced by desperate attempts at incubating rocks, or stealing eggs from other penguins, which often leads the zookeepers to give a surplus egg or an orphaned chick to penguin foster fathers. These penguin pairs, in turn, prove themselves to be great parents, successfully raising and nurturing healthy chicks. For example, the BBC reports that two male Humboldt penguins named Jumbs and Kermit at Wingham Wildlife Park are better at parenting than some heterosexual penguin couples. According to the park owner Tony Binskin: “These two have so far proven to be two of the best penguin parents we have had yet.”⁴³⁶

The display of these positively evaluated behaviors and traits may culminate in the ultimate reward: penguin marriage. So far, there has only been one reported case of a gay penguin wedding, allegedly performed in either Polarland Zoo in Harbin (northeast China)⁴³⁷ or the Wuhan East Lake Ocean World,⁴³⁸ depending on the media source.⁴³⁹ As the best parents in the zoo, two male African penguins were rewarded with a wedding ceremony, complete with groom and bride costumes (a penguin in drag!), the Wedding March played, and a fish cake served for the newlyweds. Talburt and Matus highlight that this spectacular event, for human, rather than penguin eyes, repeats heterosexual logics. The analysis of the gay penguin discursive chain sketched out by Talburt and Matus clearly reveals its adherence to neoliberal identity politics with a strong focus on individual freedoms and minority rights.

By identifying discourses on gay penguins as perpetuating homonormative logics, we can begin to attend to the political component these representations of

⁴³⁵ AZA Penguin Taxon Advisory Group, *Penguin (Spheniscidae) Care Manual*, 37.

⁴³⁶ “Gay Penguins in Kent Zoo Are ‘the Best Parents.’”

⁴³⁷ “Gay Penguin Pair Tie the Knot.”

⁴³⁸ “海洋世界裏的企鵝‘婚禮’(Sea World Penguins ‘wedding’).”

⁴³⁹ Despite only one, rather vaguely reported case of a wedding ceremony between male penguins performed in the zoo, the trope of penguin gay marriage has been rehearsed in the realm of fictional representations – an episode of NBC’s TV show “Parks and Recreation” featured the main character, Leslie Knope marrying two penguins in the local zoo to improve attendance. When it turns out that the birds are both male, Knope finds herself in the crossfire between local gay rights activist and conservative Christian groups. Feig, “Pawnee Zoo.”

queer animalities carry within the traffic in HumAnimals. Homonormativity, as defined by Lisa Duggan, is “a politics that does not contest dominant heteronormative assumptions and institutions, but upholds and sustains them, while promising the possibility of a demobilized gay constituency and a privatized, depoliticized gay culture anchored in domesticity and consumption.”⁴⁴⁰ Duggan asserts that as a tool for assimilative strategies of neoliberalism, homonormativity deploys equality rhetoric in the mainstream gay rights movement, narrowing its political scope to a few policy issues (e.g., legalization of gay marriage, adoption rights for gay and lesbian couples, and allowing openly homosexual people to serve in the military).⁴⁴¹ This “gay tunnel vision” not only privileges only those gays and lesbians who conform to the normative codes of the public/private divide, but also perfectly inscribes into the capitalist organization of everyday life and the global inequalities in redistribution of wealth.⁴⁴² In this context, seemingly innocent stories of gay penguin love and family life that culminate (or are supposed to culminate) in an almost exact copy of repro-hetero-normative monogamous marriage, invoke larger socio-economic exclusions and political frameworks.

The relation between homonormativity and heteronormativity is not simply of a mimetic or aspirational nature – they are both deeply rooted in the institutional infrastructure fundamental to the reproduction and accumulation of the capital within neoliberalism, as well as crucial for creating dominant epistemological frameworks for understanding sexuality. Lauren Berlant and Michael Warner define heteronormativity as “the institutions, structures of understanding, and practical orientations that make heterosexuality seem not only coherent – that is, organized as a sexuality – but also privileged.”⁴⁴³ By this understanding, zoos as main venues for the

⁴⁴⁰ Duggan, *The Twilight of Equality*, 50.

⁴⁴¹ It is important to note that Susan Stryker, a trans studies scholar, suggests a different genealogy of the notion of homonormativity, derived from transgender activism and marginalization of the transgender community within the broader LGBT movement. She writes: “A decade before homonormative became a critically chic term elsewhere ... transgender praxis and critique required an articulation of the concept of homonormativity.” Stryker, “Transgender History, Homonormativity, and Disciplinarity,” 149. In the context of penguin zoo stories, the focus on the sexual orientation rather than on gender identity of the birds is symptomatic of this particular marginalization of transgender politics within the larger queer movement that Stryker points to. Penguins unequivocally became tokens for gay and lesbian politics, and the discourses on their sexual behavior reflect the political concerns and investments, along with exclusions of this particular cluster of identities.

⁴⁴² Duggan, *The Twilight of Equality*, 47.

⁴⁴³ Berlant and Warner, “Sex in Public,” 548.

spectacle of gay penguins are prime examples of the institutional harnessing of sexuality by presenting reproductive heterosexuality in the animal kingdom as a natural phenomenon, and thus, folding nonhuman homosexual behavior into the same frameworks, while excluding or marginalizing any other scripts for performing sexuality. The official AZA penguin care manual addresses the issue of same-sex pairing, always in relation to reproduction:

Same-sex pair bonding does not appear to pose any problems for the health and management of penguins. ... Pairs of this nature have even been successfully used to raise fostered chicks. Bonds between same-sex individuals have also been successfully split, and the birds have successfully re-paired with individuals from the opposite gender.⁴⁴⁴

This manual lists same-sex bonding among other “undesirable” types of mate selection.⁴⁴⁵ Gay penguins become intelligible as a public phenomenon so long as they follow familiar heteronormative patterns of romantic love, monogamous partnership, and culminate in a “two plus one” family unit.

As Berlant and Warner assert, “heteronormative forms of intimacy are supported ... not only by overt referential discourse such as love plots and sentimentality but materially, in marriage and family law, in the architecture of the domestic, in the zoning of work and politics.”⁴⁴⁶ In this sense, highly anthropomorphized gay penguin tales also implant their audience with notions of what constitutes gay identity and what the agenda of gay rights ought to include. These constructions operate within a limited horizon of normative aspirations, and thus, demonstrate the realization of sexuality script in a strictly homonormative manner. Human interventions in penguin zoo populations, and the stories told about their sexual behavior and social organization, are further utilized to discipline human populations in matters of sex and intimacy. This creates a double looping effect; penguins are first anthropomorphized, only to be disposed of as signifiers of “the natural order,” in order to instruct human behavior and naturalize identity formations.

Lesbian Penguins

When in 2014 two female Gentoo penguins named Penelope and Missy were observed displaying signs of courtship at the Dingle Oceanworld in Kerry, they were

⁴⁴⁴ AZA Penguin Taxon Advisory Group, *Penguin (Spheniscidae) Care Manual*, 24.

⁴⁴⁵ *Ibid.*, 52.

⁴⁴⁶ Berlant and Warner, “Sex in Public,” 562.

hailed as Ireland's first same-sex penguin couple.⁴⁴⁷ Kate Hall, the head penguin keeper commented: "The ones in Central Park are icons for the gay community over there. They have a lot of fondness and affection for them. It's definitely not an unusual occurrence although this time it's two females."⁴⁴⁸ Indeed, the most prominent reports of homosexual pair bonding between penguins in zoos concern male animals. These inevitably become primary reference points for other cases. While Tango's relationship with another female penguin was only briefly reported and no additional news of their potential "love story" followed, only two other cases of "lesbian penguins," including Penelope and Missy mentioned above, reached international media. In their comparative analysis of the media representations of the Bremerhaven and Central Park "gay penguin" cases, K. Smilla Ebeling and Bonnie B. Spanier point to the striking "sex bias against females" in the coverage of penguin homosexual behavior.⁴⁴⁹ Is the apparent invisibility of "lesbian" penguins a result of less frequent same-sex bonding among female penguins than in males? Or maybe the idea of lesbian penguins, with their formal tailcoat appearance, is a little too butch for the general public's perception of female-to-female intimacy? Can the scarcity of lesbian penguin stories be treated as a reflection of the hierarchies within the human LGBTQ community, which ultimately might be seen as the primary audience for the "homosexual penguins" spectacle?

When attempting to approach the question of frequency of same-sex pairing in male and female penguins from a scientific ethological perspective, species classification reveals significant differences between different penguins. Popular news stories usually refer to penguins as an almost homogenous group of aquatic birds, but in fact, scientists report between seventeen and twenty different species within the penguin subfamily, living across the Southern Hemisphere from Antarctica to the Galápagos Islands. Each of these species, while displaying many similarities in terms of breeding behavior – like nesting in large colonies and taking turns at incubating eggs – may vary in sexual habits and mate fidelity. One of the main difficulties in determining same-sex behavior in penguins is that all of these species are sexually monomorphic, meaning that it is almost impossible to visually distinguish between sexes. However, captive populations in zoos and aquariums allow

⁴⁴⁷ Withnall, "Lesbian Penguins Pair off in Same-Sex Couple First for Aquarium in Ireland."

⁴⁴⁸ Kelleher, "Ireland's First Gay Penguins Make Perfect Match."

⁴⁴⁹ Ebeling and Spanier, "What Made Those Penguins Gay?," 135.

for closer examination and sexing of birds and often reveal that in some species, almost twelve percent of all copulations are between males.⁴⁵⁰ Moreover, one field study of homosexual mating in King penguins confirms that vast majority of same-sex courtship was observed between males (24.4 percent in comparison to 1.9 percent for female pairings). This report posits a surplus of males in the colonies as a possible explanation for why “lesbian penguins” are a rarer phenomenon than “gay” ones.⁴⁵¹ Many studies of birds in general point to a so-called “sex-ratio bias” (a larger concentration of one sex in the population) as an explanation for non-reproductive sexuality, as if the shortage of males or females would automatically lead to homosexual behavior.⁴⁵² As I pointed out earlier, narratives on queer zoo penguins are often constructed in direct dialogue with scientific observations *in situ*. Gay penguins are presented as defying the hypothesis of limited mate choice, especially when it is emphasized that females were “made available.”

Penelope and Missy belong to the Gentoo penguin species, which has a high ratio of observed same-sex coupling in both the wild (23 percent of all courtships)⁴⁵³ and in captivity.⁴⁵⁴ According to Bruce Bagemihl, in this particular species, females not only display reverse mounting (females mounting males), but they also form lifelong homosexual bonds and are exclusive in their partner choice until one’s death:

Females that pair with each other usually lay eggs in the nest that they tend together; because these birds do not typically mate with males, their eggs are infertile. However, female pairs can become successful foster parents in captivity, incubating and hatching fertile eggs when provided and successfully raising the resulting chicks.⁴⁵⁵

It might seem that these “lesbian” penguins, which form faithful lifelong relationships and are able to produce eggs themselves – the only element missing from the complete, happy rainbow family for which their male counterparts are believed to strive – would be ideal for the discursive production of the homonormative penguin family portrait. As I argued earlier, strong reproductive drive is a crucial component of narratives constructing gay penguinness – a figuration that later radiates into public

⁴⁵⁰ Bagemihl, *Biological Exuberance*, 2303–4.

⁴⁵¹ Pincemy, Dobson, and Jouventin, “Homosexual Mating Displays in Penguins,” 1214.

⁴⁵² Conover and Hunt, “Experimental Evidence That Female-Female Pairs in Gulls Result from a Shortage of Breeding Males”; Nisbet and Hatch, “Consequences of a Female-Biased Sex-Ratio in a Socially Monogamous Bird”; Kotschal, Weiß, and Hemetsberger, “Making the Best out of a Bad Situation: Homosociality in Male Greylag Geese”; Young, Zaun, and VanderWerf, “Successful Same-Sex Pairing in Laysan Albatross.”

⁴⁵³ Bagemihl, *Biological Exuberance*, 629.

⁴⁵⁴ Wheeler, “The Breeding of Gentoo Penguins in Edinburgh Zoo.”

⁴⁵⁵ Bagemihl, *Biological Exuberance*, 629.

debates on family, gender, and sexuality politics in humans. In the case of male penguin same-sex pairs, it is the lack of visible evidence of reproduction that usually outs them to zookeepers. Thus, it is possible that female same-sex couples remain unrecognized as such as they are able to produce infertile eggs. Even though procreation lies at the heart of both the zoo project and the construct of the “homonormative penguin,” it is the foster dads who remain a more viable political commodity. In this sense, the gay penguin phenomenon cannot be separated from a more general idea of penguins as caring fathers, as much informed by the species-specific role of male penguins in chick-rearing (determined largely by environmental factors) as by human gender stereotypes and political stakes. It is also politically more strategic to invest into naturalizing gay parenthood, rather than lesbian, as motherhood already enjoys much higher social acceptance and is granted a “natural” status by default. However, in some political contexts, even “lesbian” penguins can serve the purpose of inciting heated political debates on equality, national exceptionalism, environmental protection, and progressive politics, while obscuring the multileveled forms of containment, captivity, and border policing.

Pink-washed Penguins

In December 2013, the Ramat Gan Safari Park near Tel Aviv, Israel, announced that a pair of their African penguins (known also as Jackasses or black-footed penguins) comprised two females, and was not an opposite-sex couple as they had initially assumed. Suki and Chupchikoni passed as “straight” because they differed in size; the larger Chupchikoni was assumed to be male until a routine anti-malaria blood test revealed otherwise. Media narratives have utilized size difference, gendered in penguins, to position them stereotypically along the human femme/butch dichotomy: Suki was described as “small and delicate,” while Chupchikoni a suit-wearing masculine type, with a name suggesting she has a little something (chupchik in colloquial Hebrew means “thingy,” and in slang can mean “penis”).⁴⁵⁶ Snappy headlines in local and international press “outed” the penguin couple as “happily living undetected”⁴⁵⁷ and “shacking up”⁴⁵⁸ at the Israeli Zoo, and even flagged this

⁴⁵⁶ Livneh, “A Love Story That Offers Hope to Non-Lesbians (And Non-Penguins).”

⁴⁵⁷ Rose, “Lesbian Penguins Discovered Happily Living Undetected At Israeli Zoo.”

⁴⁵⁸ Schuster, “Surprise! Lesbian Penguin Couple Shacking Up at Israeli Zoo.”

penguin romance as “A Love Story That Offers Hope to Non-lesbians (And Non-penguins).”⁴⁵⁹

But here, the unapologetic intermingling of human and penguin sexuality spilled over its usual perimeters of legitimizing homosexuality by means of naturalization, into the realm of national identity politics and extremely tense international relations. As the daily newspaper *Haaretz* reported: “Israel is famously tolerant of its gay community, by and large, for which two penguins at the Ramat Gan Safari park can bless their lucky stars.”⁴⁶⁰ Another local website specializing in environmental news from the Middle East (mostly reporting on Israeli clean technology), *Green Prophet*, went even further into the terrain of international comparisons of LGBT rights: “Unlike Gulf states nearby, and Kuwait which is hoping to start a gaydar test to ban gays from moving to the country, Israel is extremely tolerant when it comes to its gay community. So much that it's promoting the ‘free’ love of its latest lesbian couple, two penguins at the zoo.”⁴⁶¹

Portraying the zoo – and by extension, the state of Israel – as a safe haven for gays and lesbians is a cruel irony given the double entrapment it rests on: within an institution of captivity and a militarized nation-state fixated on compulsive border policing through a warfare technologies of walls and checkpoints. More importantly, embracing “lesbian” penguins as symbols of national pride inscribes them into the conceptual frames of “homonationalism,” and more specifically, a tactic known as “pinkwashing.” In *Terrorist Assemblages* Jasbir Puar examines how the incorporation of “progressive,” gay-friendly national politics reinforces U.S. exceptionalism and its imperial structures, while at the same time justifying military violence, racialized surveillance, and detention.⁴⁶² Building on Duggan’s formulation of homonormativity, combined with Said’s theory of Orientalism, Puar further complicates the idea that the modern nation-state’s formation rests exclusively on the heteronormative organization of life (along with the structures of reproduction, domesticity, modern couple, and the nuclear family). Thus, deviant sexualities are left standing entirely outside of national frameworks.⁴⁶³ As a mode of modernity,

⁴⁵⁹ Livneh, “A Love Story That Offers Hope to Non-Lesbians (And Non-Penguins).”

⁴⁶⁰ Schuster, “Surprise! Lesbian Penguin Couple Shacking Up at Israeli Zoo.”

⁴⁶¹ Kloosterman, “Lesbian Penguins ‘out’ at the Israeli Zoo.”

⁴⁶² Puar, *Terrorist Assemblages*.

⁴⁶³ *Ibid.*, 39.

homonationalism – or “the emergence of a national homosexuality”⁴⁶⁴ – deploys sexuality as the fundamental category underwriting the favored model of citizenship and national sovereignty, making “tolerance” for LGBT individuals and some of their liberal rights a signpost for civilizational progress. According to Puar, certain queer subjectivities that follow normative pathways present themselves as available to being folded into the national body and embroiled in the production of truly perverse, racialized, deviant, and barbaric terrorist Others.⁴⁶⁵

In the vigorous debate sparked by Puar’s theorization of U.S. homonationalism during the war on terror, Israel’s self-promotion as an island of tolerance towards LGBTQ individuals in the Middle East stood out as a showcase of pinkwashing; that is to say, a practice of redirecting public attention from the atrocities of the occupation of Palestine towards an image of Israel as a gay-friendly modern democracy.⁴⁶⁶ For Puar, homonationalism and pinkwashing are neither synonymous, nor parallel phenomena. She conceptualizes homonationalism in a broader framework as “an analytic to apprehend state formation and a structure of modernity: as an assemblage of geopolitical and historical forces, neoliberal interests in capitalist accumulation both cultural and material, biopolitical state practices of population control, and affective investments in discourses of freedom, liberation, and rights.”⁴⁶⁷ Pinkwashing, however, is its manifestation, still complicit with the regimes of settler colonialism. Suki and Chupchikoni became folded into to this narrative as deserving queer subjects, finding a refuge in the Israeli zoo – a reformed biblical Ark that welcomes two of *any* kind. All articles about this story not only explicitly present Israel as the most tolerant and accepting state for homosexuals in the Middle East, but also invoke the surrounding Arab states as inherently homophobic spaces, implying that the penguins (and humans) would not be safe there. “Gay penguinness” gets trafficked into this context not under the banner of equal rights, but rather as a marker of national identity. In this sense, the cute lesbian penguin couple subtly taps the

⁴⁶⁴ Ibid., 2.

⁴⁶⁵ Historian George L. Mosse presented a similar argument earlier. He shows how from the eighteenth century in Europe, nationalist subjectivity formation rests on bourgeois respectability, binding race to sexuality. For example, Mosse argues that nineteenth-century sexological categorizations of true- and pseudo-homosexuals can be read as attempts at legitimizing certain forms of homosexuality. Mosse, “Nationalism and Respectability,” 239; Mosse, *Nationalism and Sexuality*, 1988, 133–52.

⁴⁶⁶ Schulman, *Israel/Palestine and the Queer International*.

⁴⁶⁷ Puar, “Rethinking Homonationalism,” 337.

affective-symbolic registers of the Israeli pinkwashing campaign, turning the zoo into yet another site for exercising sexual citizenship.⁴⁶⁸

In more general terms, zoos are far from being neutral zones in the history of the Israeli occupation of Palestine. Irus Braverman offers an extensive analysis of the acute power relations between Israeli and Palestinian zoos.⁴⁶⁹ Braverman focuses on three zoos caught within the highly policed and contested borders, only seventy-seven kilometers apart from one another: the Jerusalem's Biblical Zoo, the Qalqilya Zoo in the West Bank, and the Gaza Zoo. She presents each institution within the complex web of colonial power relations, each representing a different model for Israeli-Palestinian relationships. The Biblical Zoo, established in 1940 and designed as a literal reenactment of biblical animals tales, aspires to the status of a neutral space for the peaceful coexistence of Israeli and Palestinian visitors.⁴⁷⁰ Meanwhile, the Palestinian Qalqilya Zoo in the West Bank is critically dependent on the Israeli zoos, which donate their surplus or unwanted animals on condition that the Qalqilya Zoo in turn adopts their livestock know-how and agrees to the supervision of the wellbeing of the donated animals by Israeli specialists. In other words, under the guise of a wildlife conservation mission, a typical postcolonial situation of indirect control is established between the benevolent donors of zoo animals with professional means of care, and passive recipients of developmental aid.⁴⁷¹ One state-owned and several private zoos operate in the 365 square kilometer Gaza Strip – a regularly bombed war zone sealed off by border walls. In Braverman's analysis, the Gaza Zoo stands out for its absolute lack on any relations with Israeli wildlife conservation politics, in contrast to the previously described models of apparent coexistence and conditional cooperation. Despite the blockade, nonhuman zoo animals from the occupied territories often come into public attention as spectacularized and grotesque allegories for human suffering under the extreme conditions of war; Sara Salih, a literary scholar, examines media reports on Gaza's zoos and their inhabitants burgeoning

⁴⁶⁸ Other cases of “gay” and “lesbian” penguins discussed in this chapter also inscribe into the pinkwashing politics as long as their status is upheld in order to elevate the rights of one minority group at the expense of others. Gay penguins in many national contexts are used as markers of development and progressive politics and in this way contribute to the politics of national exceptionalism.

⁴⁶⁹ Braverman, “A Tale of Two Zoos”; Braverman, “Animal Frontiers.”

⁴⁷⁰ Braverman, “Animal Frontiers,” 128–29.

⁴⁷¹ This is how Braverman evaluates this troubled cooperation: “in the occupied West Bank, the battle manifests in strictly patriotic terms: through caring for their animals, the Palestinians assert their independent national identity; the Israelis, in turn, reassert their power through their insistence on donating animals, advice, and access.” *Ibid.*, 147.

around the 2008 Israeli offensive. She notes that, “if zoos resemble penal institutions such as occupied countries and refugee camps, they’re also a sign of nationhood and normality and they indicate the existence of a class of people with sufficient wealth and leisure to spend looking at animals.”⁴⁷²

As important signifiers of modernity and progress, zoos influence the nationhood of Israel and Palestine differently. In this context, a female penguin couple housed in an Israeli zoo becomes an important marker of progressive politics and national identity. The Ramat Gan Zoo is closest to the first model described by Braverman, and lesbian penguins inscribe well into a moral tale of a peaceful refuge. Although in previously discussed cases, male penguins were cast as allies in the LGBT struggle for recognition, Suki and Chupchikoni’s gender matches a homonationalist agenda, following a script of gendered politics of belonging with female (reproductive) bodies as symbols of the national body.⁴⁷³

Zoos as venues for sexuality battles combine two aspects crucial for the circulation of the lesbian penguins’ story as an element of the pinkwashing campaign. These two aspects might seem separate at first, but in fact, are closely intertwined: (1) zoos are chief sites for tourism and (2) were recently rebranded as environmentalist institutions. Starting with this first aspect, tourism has been one of the main channels for pinkwashing in Israel. This is particularly true of Tel Aviv, in which the Ramat Gan Safari Park hosting Suki and Chupchikoni is located. Tel Aviv has been actively and successfully marketed as a top gay tourist destination for the past decade, ranking high in popularity charts of the pink travel industry. Although the zoo, promoted primarily as a site for family- and child-oriented leisure, might not be a first-choice attraction for gay tourists coming for Tel Aviv’s beaches and nightclubs, on the wave of gay penguins stories this zoo, located in the self-made pink capital of Israel, became home for their very own homosexual penguins. Moreover, media coverage of the story implies that the two penguins “met” at the zoo,⁴⁷⁴ anthropomorphizing them as if they had a date in Tel Aviv. However, animal mobility within the network of the World Association of Zoos and Aquariums (WAZA) is largely determined and governed by particular Species Survival Plans for the given species population, as

⁴⁷² Salih, “The Animal You See,” 306.

⁴⁷³ Yuval-Davis, *Gender & Nation*.

⁴⁷⁴ McCormick, “Safari Park Surprised to Find Assumed Opposite-Sex Penguin Couple Are Actually Lesbians.”

well as a number of other factors. In fact, African penguins, native to the south coast of Africa, are “foreign guests” to the Israeli zoo. When the high mobility of certain LGBT populations is used to obscure the systematic containment of others, animal zoo romance stories circulate as another form of pink currency within an economy of gay tourism. This in turn gives a clear signal to potential consumers of the “gay Tel Aviv” brand that, naturally, it is a place to feel safe and welcomed.

But there is another downside to this gay paradise. Intensive tourism and the occupation it helps sustain are destructive to the natural environment. Robert McRuer in his essay “Pink,” discusses the environmental costs of pinkwashing, suggesting that the occupation is an environmentalist issue. After Jad Isaac and Mohammed Ghanyem, he lists the destructive practices that the occupation of Palestine and the blockade of the Gaza Strip bring to the environment: relocation of Israeli industries along with pollution and toxic waste, unequal use of water resources leading to draught and desertification, and overdevelopment of the land.⁴⁷⁵ All of these destructive practices, combined with military activity, are hostile for wildlife. McRuer writes: “There is obviously not a direct or active relation between the generalized invisibility of these practices of environmental degradation in Palestine and the pink visibility nurtured by the Israeli state; ... pink visibility is in fact contingent on not noticing such relations.”⁴⁷⁶ Following this line of thought, the role of the zoo – an environmentally-driven institution devoted to the preservation of endangered species and their habitats – as one of the sites of pink-washing through the lesbian penguins story can be understood as another form of distraction, obscuring the destruction of the natural environment along with people’s livelihoods, happening nearby.

The zoo is another instrument in an Israeli greenwashing project that legitimizes state interventions and displacements on the excuse of environmental care. This also echoes the long-lasting tradition in Western environmentalism and the national parks movement in North America of dispossessing and displacing local human populations to make space for pure nature, made available for admiration and protection as a manifestation of pastoral power.⁴⁷⁷ With lesbian penguins on the zoo agenda, pinkwashing and greenwashing go hand in hand. In this context, the zoo stands out as yet another settlement project, legitimizing Israeli presence on occupied

⁴⁷⁵ McRuer, “Pink,” 73.

⁴⁷⁶ Ibid.

⁴⁷⁷ See, Catton, *Inhabited Wilderness*; Spence, *Dispossessing the Wilderness*; Rashkow, “Idealizing Inhabited Wilderness.”

land and tying national history to the larger timeframe of natural history.⁴⁷⁸ The story of lesbian penguins finding home and love in the Ramat Gan zoo illustrates how nonhuman zoo animals can be powerful political signifiers. Although a marriage plot would be a realistic choice for the Ramat Gan Safari Park to continue this rhetoric, the main focus in Suki and Chupchikoni's story was on safety and freedom of expression, rather than on family values (that took center stage in other discussed contexts). While penguins enjoy a good reputation for being adorable, faithful to one another, and easily relatable to humans, is there anything that might undermine this overwhelmingly positive, almost impeccable, image?

Hooligan Cocks

In 2012, a copy of a mysterious pamphlet with a boldfaced header, '**Not for Publication,**' was unearthed in the reprints section of the Bird Group at the Natural History Museum, London, nearly one hundred years after its printing.⁴⁷⁹ Dr. George Murray Levick, a member of the British Antarctic Expedition, studied the largest known Adélie penguin (*Pygoscelis adeliae*) colony in Cape Adare in 1911 and authored this four-page-long paper, titled, "The sexual habits of Adélie penguins." At the time, this work was deemed inappropriate for public eyes. Originally printed in February 1915, it was removed from the expedition's official report, which Levick published as a scientific study of penguin social behavior under the title, "Natural history of the Adélie penguin."⁴⁸⁰ Some of the sexual habits the explorer was able to observe in the rookeries of the breeding colony shocked him to such extent that in his own field notes he encoded those entries in the Greek alphabet. The short pamphlet includes only brief notes on reproductive behavior, pairing rituals, and parental care, and instead focuses on groups of unpaired male penguins that Levick refers to as "the hooligan cocks." The explorer only hints at their unusual sexual behavior in his other publications; here, in this forbidden pamphlet, he is able to describe it fully and in detail, as depraved, immoral, and corrupt.

⁴⁷⁸ The crossing between pinkwashing and greenwashing techniques through the deeply entangled institution of the zoo could be termed "fur washing" as Braverman suggests. She defines "fur washing" narratives as akin to pinkwashing: "a deliberate strategy to conceal the continuing aggression toward Palestinians behind an image of modernity. Through the work of Israeli zoos and other conservation organizations in furthering their benevolent missions, aspects of Palestinian life that formally lie beyond the purview of the Israeli nation-state can come under its informal control." Braverman, "Animal Frontiers," 126.

⁴⁷⁹ Russell, Sladen, and Ainley, "Dr. George Murray Levick (1876–1956)."

⁴⁸⁰ Levick, "Natural History of the Adélie Penguin."

In stark contrast with more contemporary perceptions of penguins as adorable creatures, devoted to their “families,” the hidden story of these much less likable packs of penguin “hooligans” shakes the perfect image of these nonhuman animals, a perfect image that has been utilized widely as a sort of role model for human sexual practices. In this section, I wonder how the clash between idealized images of family-oriented penguins, employed to tell stories of love, devotion, as well as domesticated homonormativity, with an account of perverted penguins, committing “crimes against nature,” can create a queer tension that allows for the re-imagining of penguins as more liminal and elusive objects of human desire, and thus capture and contain the complex phenomenon of sexuality within the framework of “nature.” More specifically, “perverted penguins” allow for historicizing the “homosexual penguins” pattern within the traffic in HumAnimals: observations of same-sex bonding between penguins gain different moral values depending on political and historical circumstances, as well as the position of human observers. Whereas in the twenty-first century homosexual behavior among captive penguins is framed within a context of familial sentimentality, with a strong focus on reproductive drive and parenthood, the early-twentieth-century account of wild penguins’ same-sex mating was perceived as ultimately aberrant behavior, paralleled with necrophilia, rape, or sexual assault. This movement is aligned with a double transformation in moral meanings ascribed to homosexuality in humans, and more general perceptions of nature and wilderness.⁴⁸¹

It is relatively easy to observe social behavior in wild penguins. As they lack land predators, they tend to approach explorers without fear. They almost seem to seek human companionship. Levick spent twelve months among the Adélie in a colony of about 200,000 birds.⁴⁸² Surrounded by hundreds thousands of these peculiar aquatic birds, he was immersed in their (terrestrial) world, and thus was able to carefully observe their habits and espy their vices over one full breeding cycle. He produced extensive zoological notes and took photographs of his life among these curious birds. But he also brought back nine Adélie penguin skins – a grim reminder of the taxidermic underbelly of any scientific project. Apart from the aforementioned scientific report from the expedition, Levick published a popular book entitled *Antarctic penguins – a study of their social habits*.⁴⁸³

⁴⁸¹ Cronon, “The Trouble with Wilderness.”

⁴⁸² Russell, Sladen, and Ainley, “Dr. George Murray Levick (1876–1956),” 387.

⁴⁸³ Levick, *Antarctic Penguins*.

In this work intended for the general public, penguins are presented as dignified, almost ancient figures, coming from a far-away foreign land. As such, they are highly anthropomorphized as mystical native inhabitants of the Antarctic. Levick gives a brief sketch of the Adélies:

When seen for the first time, the Adélie penguin gives you the impression of a very smart little man in an evening dress suit, so absolutely immaculate is he, with his shimmering white front and black back and shoulders. He stands about two feet five inches in height, walking very upright on his little legs.⁴⁸⁴

This representation is reminiscent of the opening scene in *March of the Penguins*, where mysterious, human-like figures loom on the horizon of this mesmerizing crystal desert landscape. Visually, through a sun-blurred frame, the film's scene reminds one more of an African savannah than an Antarctic iceberg, while the voiceover describes the characters slowly moving along the horizon as a "stubborn tribe" that stayed behind on the continent, once a tropical jungle, and endure the radical weather conditions.⁴⁸⁵ The film offers a neocolonial fantasy of penguins as the indigenous inhabitants of Antarctica, and, along with their persistent anthropomorphization, depicts them as proud, albeit comical figures. In this way, the film not only warps the geographical imaginaries of polar expeditions and their temporal frameworks, but also produces a racialized animality. In Levick's account, the penguin is belittled, infantilized. As "noble savages," penguins are ephemeral imaginations, and in their discursive journeys as referents to human sexuality, they accommodate well models of white normative subjectivity.

Lisa Uddin, in her analysis of the U.S. National Zoo's display of their white tigress in the 1960s and 1970s, describes the discursive apparatus at work which produces these seemingly contradictory representations. She points to the split between representations of the female tiger as a foreign body and as a domestic body: "Both highly gendered and classed, one body was fiercely exoticized and eroticized, while the other appeared as a familiar, desexualized model of motherhood."⁴⁸⁶ Similarly, penguins form highly ambivalent, or rather flexible mediums: once leaning towards colonial longings as racialized foreign bodies, and other times being fetishized as local tokens of perfect modern bourgeois fatherhood. For example, while

⁴⁸⁴ Ibid., 3.

⁴⁸⁵ Jacquet, *March of the Penguins*.

⁴⁸⁶ Uddin, *Zoo Renewal*, 126.

in *March of the Penguins* traditional gender roles are reversed with males being portrayed as “home-makers,” Levick puts more emphasis on the traditional division of labor in penguin rookeries, “as it was generally the hen who was at home, and the cock who was after the stones.”⁴⁸⁷

Despite the overwhelmingly positive portrayal of the Adélie’s social life, Levick sporadically mentions events that he found deeply disturbing:

Many of the colonies, especially those nearer the water, are plagued by little knots of “hooligans,” who hang about their outskirts, and should a chick go astray it stands a good chance of losing its life at their hands. The crimes which they commit are such as to find no place in this book, but it is interesting indeed to note that, when nature intends them to find employment, these birds, **like men degenerate in idleness** (emphasis mine).⁴⁸⁸

These “hooligan cocks,” depicted as engaging in perverse sexual practices and preying on the chicks, are predominantly non-breeding male penguins of various age – either young unpaired wanderers, or older widowers. The word “hooligan” derives from late-nineteenth-century police-court reports and can be traced to an Irish family name.⁴⁸⁹ This term is thus highly classed and raced, aligning Antarctic birds with human criminals, perverts, and degenerates of early-twentieth-century British society. The unspeakable crimes that Levick witnessed in the Cape Adare penguin colony are mostly of a sexual nature and are enumerated in the highly controversial text mentioned above.

In the pamphlet, Adélie penguins are presented as driven fully by their sexual urges – paired couples copulating with high frequency, lone males observed masturbating frantically, and other cocks “... whose passions seemed to have passed beyond their control.”⁴⁹⁰ Most space is devoted to the “hooligan” bands, which he describes as terrorizing other inhabitants of the rookeries. Levick observed acts of necrophilia, rape, and sexual abuse of chicks, as well as homosexual behavior:

Here on one occasion I saw what I took to be a cock copulating with a hen. When he had finished, however, and got off, the apparent hen turned out to be a cock, and the act was again performed with their positions reversed, the original “hen” climbing on to the back of the original cock, whereupon the nature of their proceeding was disclosed.⁴⁹¹

⁴⁸⁷ Levick, *Antarctic Penguins*, 23.

⁴⁸⁸ *Ibid.*, 98.

⁴⁸⁹ “Hooligan, N.”

⁴⁹⁰ Russell, Sladen, and Ainley, “Dr. George Murray Levick (1876–1956),” 392.

⁴⁹¹ *Ibid.*, 393.

In the early twentieth century, homosexuality in the animal kingdom was still a rarely observed phenomenon, and as such was easily bracketed as pathology. Moreover, listing homosexuality along with necrophilia, coercive sex, and sexual violence was nothing uncommon in human scientific taxonomies.⁴⁹² Although some sexologists – including Ellis, Krafft-Ebing, Ulrichs, and Westphal – argued that sexual inversion was a medical, rather than legal category, male homosexuality was criminalized in the U.K. under the Criminal Law Amendment Act of 1885.⁴⁹³ This overlap between human and nonhuman representations evidences that sexuality is an extremely powerful coordinate in the busy traffic in HumAnimals.

Around the same time that Levick produced his reports, penguin homosexual behavior was also reported in captivity. The Edinburgh Zoo acquired a small group of King penguins shortly after its opening in 1913. Although the cargo of several species of penguins was merely an addition to a purchase of seals from a whaling expedition coming back from Sough Georgia, only the King penguins survived the capture, travel, and acclimatization in Scotland.⁴⁹⁴ The Edinburgh Zoo soon became a pioneering institution in successfully breeding them in captivity, but the entire process was eventful and full of revelations for human observers witnessing a truly intriguing penguin soap opera. It appeared that mating these birds posed some trouble, because they frequently changed their couples, formed “love triangles,” and tended to pair up with partners of the same sex. This proved extremely perplexing for the zookeepers, who initially gave them female and male names according to heteronormative human standards. A detailed record of penguin personal affairs can be found in *A Book of King Penguins*, written by the Edinburgh Zoo’s founder, Thomas Gillespie, published in 1932. Directed to a general audience, this book is awash with humor and heavily gendered anthropomorphization, representing penguins as “ladies” and “gentlemen,” “wives” and “husbands,” “mothers” and “fathers,” as well as reporting on their “marriages” and “divorces.”⁴⁹⁵ Gillespie reports on the drifting gender meanings assigned to the zoo penguins in the following way:

⁴⁹² Lombroso and Lombroso, *Criminal Man*.

⁴⁹³ Weeks, *Sex, Politics and Society*, 1981; Brady, *Masculinity and Male Homosexuality in Britain, 1861-1913*, 27.

⁴⁹⁴ Gillespie, *A Book of King Penguins*, 31.

⁴⁹⁵ For example, this is how Gillespie introduces the penguins: “The King penguin is a person of composure and restraint and regal manners, and he never forgets the dignity that distinguishes him – at least not for so simple and comparatively unimportant a matter as the selection of as spouse. Rather, he seems content to leave the affair in the hands of Fate and awaits the results in philosophic calm.” *Ibid.*, 95.

Andrew – I decided then to call him in future Ann – was, and is female, and Andrew (or Ann) being female, Caroline was just as certainly male! Alas for the picture I have tried to draw of motherly love and wifely duty and feminine excellence! How devastating is Truth! These virtues I had imagined lie shattered and their fragments convict me of a grave slander against the whole masculine world! Caroline it is – I must now and in future call him Charles – who stands for the highest paternal devotion and domestic duty and self-sacrificing labour. Ann is revealed as unstable, and undomestic, fickle, flirtatious – and feminine!⁴⁹⁶

As it turned out, after almost seven years of careful observation of this tiny penguin colony bursting with sexual tensions, the keepers ascribed gender to these birds wrongly in all cases but one. These fascinating shifts in penguin “assigned” gender identities and roles reveal much more about the humans than about the birds.

Gillespie does not attempt to analyze homosexual behavior of the penguins at all. In his other account of the Gentoo penguins’ breeding in the Edinburgh Zoo, he contends: “In 1938 no fewer than seven pairs of gentu penguins built nests, and two eggs each were laid in five of them. No eggs appeared in the other two nests and it was suspected that these ‘pairs’ might consist of two cock birds going through the formality of nest building.”⁴⁹⁷ Framing nest building – an activity associated mostly with its reproductive function – as a “formality” sterilizes this penguin homosocial behavior, removing it from the realm of sexuality, and hinting at some sort of innate instinct pushing penguins to automatically fulfill their pre-designed duty. The noticeable distrust in the legitimacy of this nonhuman animal behavior is indicative of the still widespread belief that homosexuality is an aberration, an error in nature. As such, it oftentimes gets blamed on the artificiality of captive conditions. But these very conditions themselves may vary to a large extent, and more crucially, they can shape human perceptions of animal ontology.

Recent public interest in the sexual habits of penguins, shared across different political positions and with varied political aims, creates a new kind of penguinness based on selecting those bird qualities that fit a human agenda. This penguinness is a familial and a monogamous one. It is a penguinness tailored for specific kinds of geopolitically situated human subjectivity formations: the nuclear family, the responsible gay couple, and lesbian domesticity. Each of these positions offers a biological grounding for ideas on gender and sexuality, but at the same time is a powerful tool for territorializing these categories.

⁴⁹⁶ Ibid., 119.

⁴⁹⁷ Gillespie, “Penguin breeding in Edinburgh,” 488–89.

The perverted “hooligan cocks” from a century ago do not fit into this modern family portrait for several reasons: they are not individualistic enough and their rebellious homosociality seems to be dangerous for the dominant majority. They are steered by a sexual, rather than reproductive drive. In fact, they symbolize reproductive failure. The tremendous contrast between “family penguins” and “hooligan cocks” upholds a queer tension that allows for deconstructing the cage of “penguinness” that informs human understandings of our own desires through another species’ behavior. At the beginning of the twenty-first century, these flightless birds with their tuxedo-like plumage and wobbly walk became role models for romantic relationships, characterized by different combinations of monogamy, fidelity, and family morals.

Resisting Penguins

In June 2015, I visited the Central Park Zoo in New York. Armed with my camera, field notebook, and pen, I went with one particular purpose: to look for any trace of Roy and Silo’s story. I especially anticipated encountering signs of the gay penguins love story around the penguin enclosure. To my surprise, there was nothing to be found that would remind of the pair of birds that stirred debates all around the world on the naturalness of homosexuality. There was no bronze monument to these famous inhabitants of the zoo, no informational plaque detailing their romance, not even any small rainbow sticker on the wall or glass window of the penguin pool. I spoke to the penguin keeper asking explicitly about Roy and Silo, but he could not recall any news about the birds. He did inform me, though, that he is writing his own book for children, featuring zoo bats as main characters to teach kids about friendship, tolerance, and being different in a multicultural society.

The absence of any commemoration of these gay penguin celebrities is significant. First of all, the spectacle of homosexual zoo animals is not the biggest income generator for zoos. More importantly, though, the actual embodied lives of these nonhuman animals are not the focal point of the spectacle. It is rather about what kind of stories these creatures enable humans to tell about ourselves. Sexual activity in various species of penguins and same-sex penguin couples in captivity has been an object of scientific research for over a century. The multiplicity of stories and political contexts in which penguins serve as meaning-making animal bodies proves, on the one hand, that nonhumans are highly political creatures. On the other hand, this

multiplicity puts the stability of any identity formation these nonhumans are used to fortify under question. The queer tension created by discrepancies between various, seemingly contradictory penguin personas opens up diverse possibilities for patching together alternative modes of performing identities and desires, as well as for play with their representations. It allows for imagining utopias.

In this chapter I critically reviewed multilayered stories of different homosexual, gay, lesbian, queer, perverted, and straight penguins through a variety of representations: a book for children and a wildlife documentary, scientific articles and popular media. When writing, I often wondered what actually happened with Roy and Silo. It seems anticlimactic to cut off their story here. I tried to imagine possible continuations of this zoo-bound love affair that spilled outside the walls of the institution of captivity. Finally, I found one in a storyline created by John Greyson, a Canadian filmmaker, video artist, and queer activist. In his short film, titled, *The Ballad of Roy and Silo* (2011) Greyson retells the story of the celebrity penguin gay couple in a queer pastiche form.⁴⁹⁸ The ballad is an opera featuring human actors wearing penguin masks to impersonate the main protagonists of the drama. They are singing in Italian, with an English translation appearing at the bottom of the screen. Each line is additionally illustrated with a different logo captured in an oval egg shape – Volkswagen, Apple, Wendy’s, the United Nations, a tin of sardines, and a “gay couple” wedding cake topper – to indicate the appropriation of the story by different parties from the U.S Christian Right, through the mainstream LGBT movement, to corporate actors represented as eager to capitalize on the story. Amidst the choreographed dance performance at the arranged penguin pond, the human-penguins (in actual tuxedos) sing in unison: “Our enduring love is a plate of sardines, a wonder of intelligent design, a banquet of tasty family values.”

Although Roy and Silo never actually enjoyed a wedding ceremony at the Central Park Zoo, a penguin marriage plot was woven through their story as a possibility imposed on the animals, clearly reflecting human desires for gay marriage recognition laws. In Greyson’s film, this dream is realized as Silo, kneeling down, proposes to Roy:

Roy: I cannot endure another winter without matrimonial recognition my beloved Silo.

Silo: So marry me, Roy, my fishy-breathed husband.

⁴⁹⁸ Greyson, *The Ballad of Roy and Silo*.

The narrator of the next part of the film wears a gas mask and a hat that makes him look like a hoopoe bird. As the representative of the Sanguine Books© publishing house (a pun on the worldwide publishing conglomerate Penguin Books), he narrates the history of Roy and Silo's love affair, following the standard storyline and going through the details of their relationship and parenthood at the Central Park Zoo (but leaving out their break up), as well as giving contextual information on the controversy over *And Tango Makes Three* and *March of the Penguin*. This part of the story is a relatively close to what was reported by the media.

After this summary, the film delves into the “after” of the “and they lived happily ever after.” The camera gives a peek at an intimate domestic scene, wherein Roy and Silo are found in their home, outfitted with comfortable couches and modern kitchenware, a setting far from resembling their zoo enclosure. In their cozy nest, the protagonists drop their formal tuxedos, and stark naked engage in mundane domestic chores: Roy crushes ice in a blender for a cocktail, while Silo serves sardines on a plate. A fabulous gay life, yet something is still missing: “They say we have it all, enduring love, a devoted daughter, plenty of fish. Yet we cannot wed in New York State.” Suddenly, the hoopoe publisher jumps out from the freezer with a solution at hand. He wants Roy and Silo to become “spokesmodels” – a play on words, removing the “person” from “spokesperson” – for Sanguine Books©, which is embarking on a project to rebrand their Gay Classics Library. In return, Roy and Silo are offered a wedding in Toronto. The penguins, however, are mostly interested in the fish and shrimps. They settle on a deal: “The wedding of the year! What’s this little roundelay? Should the gift registry be gay? Let the nuptials pay their way. Don’t worry, be Sanguine.”

What follows is a scene showing Roy and Silo on a sandy beach. The camera moves away and the viewers can see the hoopoe sitting on-top of a giant wall made out of the Gay Classics books, with recognizable titles such as: *The Well of Loneliness*, *The Immoralist*, *Maurice*, and *The Story of Red*. The penguin “Homo Honeymoon” takes place in Tel Aviv and the wall of books symbolizes the Israeli border wall. The representative of Sanguine Books informs Roy and Silo: “The Mediterranean is over there, but here, in Tel Aviv, we have a schedule of caviar and celebrity appearances. You owe it to Foster and Genet, Stein and Mishima, Puig and Walker.” The penguins resolutely demand their share of sardines. With their loud

calling for “sardine justice,” the ground starts to shake and part of the book-border wall falls down, crushing the hoopoe. In the closing scene, Roy and Silo, hand-in-hand, cross the wall, run into the sea, and walk away into the sunset. This utopian ending of their story concludes with a queer penguin anti-marriage manifesto: “Our love is a plate of sardines, not a marketing campaign, so let us choose to refuse, the frisbees and vows. Divorce me Roy, my fishy-breathed lover! And let us live in sin, forever or for a week, among the shrimp!”

Greyson’s film is clear in its political engagement. In this cinematic representation, Roy and Silo are anthropomorphized unapologetically. The firmly established portrayal of penguins in other media as upright dignified handsome birds defines the generic choice taken by the filmmaker – a parodic opera. In the *Ballad*, a parade of fit, able, quite normative human bodies in penguin masks not only gives the whole performance a kinky touch, but it also directly and purposely fetishizes nonhumans as symbols for a politics of queer disavowal. Animal masks are not used here to hide the explicit intent of telling a story of homonormativity or pinkwashing, and rather offer a critique of appropriating nonhuman bodies to naturalize human sexual identities. This queer (soap) opera shows that it does not matter if the actual penguins are “truly” gay, monogamous, or perverse, but rather that human sexual identities and desires are also not fixed, or purely natural. In this representation, nature is not employed to legitimize any moral stance, or to fortify any identity category. This queer parody, full of singing, dancing, and ice-skating, shows that the seemingly innocent stories about nonhuman animals are in fact deeply political. As Despret argues:

Nature is invited to a political project. A *queer* project. It teaches us nothing about who we are or what we ought to do. But it can feed our imagination and open our appetites for the plurality of usages and modes of being and existing.⁴⁹⁹

Whether the fame of gay penguins is still politically thriving or slowly fading away, articulating nature as a queer project in-the-making, rather than nursing it as a claim to truth, helps us to attend to the shifting sexual innovations nonhuman animals are also part of. It helps in forging multispecies queer ecologies. The versatility with which these creatures are used to nurture human understandings of sexuality and political applications of sexual identities, and the stratification of different critically

⁴⁹⁹ Despret, “Animal Abecedary,” 144.

overlapping penguin personas that emerge from that process – family penguins, gay penguins, almost absent lesbian penguins, pink-washed penguins, and perverted penguins – allows us to notice cracks in the shiny surface of captive sexualities. While homosexual behavior among zoo animals tends to be categorized as a pathological result of captivity, gay penguins enjoy the splendor of parenthood (granted by the zookeepers’ intervention), elevating their potentially aberrant behavior into the status of legitimate and authentic essence of their nature. The trope of heroic penguin fatherhood weaves through narratives of both wild, “straight” penguins as represented in *March of the Penguins*, and their urban, “gay” fellows, casting reproductive drive as one of the main aspects of the spectacle of HumAnimal sexuality.

As I demonstrated throughout this chapter, animal representations – including wildlife documentaries, news items, books, scientific studies, and artistic works – are powerful mediums for political actions, mobilizing social movements and galvanizing communities. To conclude, I bring up another penguin image that I encountered during my investigation of the penguins’ complicated itinerary within the traffic in HumAnimals. It is a simple spray-on stencil of a penguin wearing a gas mask and raising its fist (Fig. 4). This image was circulated across Turkey (and beyond) in 2013, after the Taksim Square protests in Istanbul. What started as an environmentalist sit-in against bulldozing the Gezi city park turned into a massive wave of protests that were brutally suppressed by the police, who indiscriminately fired teargas bombs at activists. Turkish mainstream TV stations failed to cover the events, and instead of political news, aired a BBC documentary on penguins titled *Spy in the Huddle* in an attempt to cool down public emotions.⁵⁰⁰ However, the penguins became incorporated into the symbolic vocabulary of the growing social movement, which transformed from environmentalist to anti-government. Among many creative mock-ups, one reads: “Antarctica is resisting! The penguins: It's not about the melting glaciers! Istanbul weather: gas, 27 degrees; Ankara: gas in the evening hours.”⁵⁰¹ According to the media scholar Şeyda Barlas Bozkuş, “they [penguins] were used in order to criticize the silent mass media and liberal news channels which ignored the

⁵⁰⁰ Oktem, “Why Turkey’s Mainstream Media Chose to Show Penguins rather than Protests.”

⁵⁰¹ “In Turkey, Penguins Become Symbol Of How Media Missed The Story.”

Gezi Park events.”⁵⁰² This might be yet another peculiar lesson in queer ornithology, illustrating that nonhuman animals are not easily captivated as mediums for distraction (as in the pinkwashing campaign) or as signposts for innocent naturalness. It also serves as a warning against underestimating the power of these seemingly benign and comical nonhuman allies.



Figure 4. “Gezi Penguin” stencil. Photo by author.

⁵⁰² Bozkuş, “Pop Polyvocality and Internet Memes,” 69.

Chapter 5. Hyenas and Hormones: Transpecies

Encounters

It was to escape from the world that I found myself each day at the zoo. The beast I knew best was a young hyena. She knew me too. She was extremely intelligent; I taught her French and in return she taught me her language. We spent many pleasant hours in this way.
— Leonora Carrington “*The Débutante*”

Museum Darkroom: First Encounter with the Hyena

In 2011, London Natural History Museum hosted the *Sexual Nature* exhibition – an “intimate, thought-provoking exhibition [that] examines the relationship between sex and evolution.”⁵⁰³ It was cast in dimmed lighting, there was sensual music playing in the background, and on display were more than 100 specimens from the museum’s vast collections. Although the main narrative line of the display followed the classic evolutionary theory, which asserts female “choosiness” and male “competitiveness,” some exemptions from the general rule of the heterosexual reproductive model caught my attention. Amongst the taxidermic bodies of animals meticulously represented in mounting positions, tableaux with pinned butterflies, collections of baculums (penile bones), and antlers, a fading stuffed spotted hyena (*Crotura crotura*) was resting peacefully in her glass case. Her part in this exhibition was clearly defined through the narrative provided on informational plaques – she was starring as a wondrous exception from the gender dimorphism and hierarchical division of labor believed to be prevalent in the animal kingdom.

Overall hyenas were mentioned at least three times throughout the entire exhibition, giving the species high visibility in the museological darkroom. Most importantly, what was cast in the spotlight to titillize and dazzle the audience were the female hyenas’ sexual organs with a 15-centimeter long clitoris. On the plaque *Facts of Life* one could read: “Female hyenas have balls. Their genitals have evolved to look like a penis and testicles.” Another board titled “*She is the boss*” clearly used the spotted hyena to dismiss the stereotype that males are always in charge in the animal

⁵⁰³ “Sexual Nature.”

world.⁵⁰⁴ Yet despite its attempts to represent the hyena as a “gender bender species,” *Sexual Natures* exhibition reproduced a narrative complicit with constructing an evolutionary model of reproductive sexuality as the norm. In this narrative the hyena serves as a sign of sexual ambiguity, an exotic/erotic curiosity, and an exception from the well-established and naturalized norm of gender binary and male dominance.

This intimate encounter with a hyena specimen neatly inscribed into the evolutionary storyline on sex and sexuality offered by the Natural History Museum left me with conflicting feelings of fascination and unease. I felt that the odd, androgynous, matriarchal, bone-crushing hyena is “my kind of liminal creature,” but this very identification in the context of the morbid classification system that posited her as a beastly “freak of nature” seemed troubling. This tension prompted my further investigation of the complex relations between biological discourses, nonhuman animals as signifiers, and their bodies as material substrates for human understandings of sexual and gender diversity. Inspired by recent scholarship on “animal transsex,”⁵⁰⁵ “animacies,”⁵⁰⁶ and “interspecies” relationships,⁵⁰⁷ I intend to explore the *transpecies intimacies* that critically engage the erotics of human attention to animal sex, and go beyond the romanticizing or celebratory approach to “queer animals,” while remaining open to the plurality of ways gender and sexuality can be expressed, lived, or inhabited as a transpecies category.

This chapter engages in debates on the material and political consequences of exploiting nonhuman animals in medical-scientific discourses on sexuality and gender. Finding natural evidence for sexual diversity and exuberance beyond sexual dimorphism is an exciting endeavor that is gaining traction within natural sciences⁵⁰⁸ and the humanities.⁵⁰⁹ However, simply collapsing transness with animality means entering a risky ground where nonhuman animals could be easily exploited for human

⁵⁰⁴ Notwithstanding, the information given on this educational board was designed to leave the audience with a feeling of peculiar “evolutionary justice” – one quickly learns that hyenas have to pay a high price for outranking males and “being the leaders of the pack” with a painful and often deadly birth giving process (their birth canal goes through the clitoris).

⁵⁰⁵ Hird, “Animal Transex,” 2006.

⁵⁰⁶ Chen, *Animacies*, 2012.

⁵⁰⁷ Livingston and Puar, “Interspecies.”

⁵⁰⁸ Bagemihl, *Biological Exuberance*; Zuk, *Sexual Selections*; Roughgarden, *Evolution’s Rainbow*; Sommer and Vasey, *Homosexual Behaviour in Animals*.

⁵⁰⁹ Hird, “Animal Transex,” 2006; Hayward, “Lesson From a Starfish”; Halberstam, “Animal Sociality beyond the Hetero/Homo Binary”; Vaccaro, “Transbiological Bodies”; Chen, *Animacies*, 2012; Hayward and Weinstein, “Introduction Transanimalities in the Age of Trans* Life.”

politics and once again used for making sense of human social relations. Outside of theoretical debates, in the realm of identity politics the discursive figure of a nonhuman animal operates as a double-edged signifier: depending on the context it might serve as a negative sign for degeneration and “inhumanity,” or function as an anthropomorphic projection – a proof for naturalness of certain behaviors, traits, or identities. As both positions pose serious political problems in the way they employ nonhumans into the symbolic labor of ontologizing otherness/sameness, – a process predicated on the hierarchies of race, ability, class, sexuality, and gender – I do not intend to ascribe identity categories to nonhuman animals. I rather analyze the complex transpecies relationships that emerge in the domain of scientific studies on nonhuman animals and attend to the untold stories running in the undercurrent of the mainstream scientific portrayal of the spotted hyena. These relationships play out in a rich and dynamic constellation of movements across the shifting boundaries between the biological and the cultural, the human and the nonhuman, the natural and the artificial. I follow the spotted hyena as a species contradicting the patriarchal gender roles in her travels within the larger-than-human kinship scheme of the “traffic in HumAnimals” to refigure how sexuality and gender function along these transpositions. This is particularly palpable in the special attention paid to the material and symbolic power of genitalia and hormones as essential (and essentialized) sexual markers in the scientific stories on hyenas. That is why I carefully tend to the relationship between parts and wholes within this traffic, and between narratives on passing and piecing that it influences.

The spatial setting of my analysis is also multidirectional travel – from African savannas to captive animal colonies, and between institutions like the Natural History Museum, the zoo and the scientific field station. This time the zoo is not in the focus, but its regimes of captivity are discernible in the scientific mission of the hyena colony. Following the method set up by Donna Haraway in her studies of primatology,⁵¹⁰ I do the detective work of identifying the main actors of the human-hyena relationship in these deeply entangled contexts. Not surprisingly, a gripping story of a few involved scientists and their followers emerges. In order to delineate a detailed itinerary of the traffic between human and nonhuman animals within this interspecies affair, I conducted a comprehensive search of three major scientific

⁵¹⁰ Haraway, *Primate Visions*.

journals in endocrinology, looking for references to studies on spotted hyenas.⁵¹¹ Nonhuman animals are not the only ones to travel intensively through these different institutional settings, but human scientists also change their habitats according to the flows of funding and research opportunities. This multidirectional movement of bodies and capital reveals intensive traffic of ideas about gender expression and sexuality across taxonomic, national and institutional borders.

I also look at a cultural representation of the hyena outside of biomedical registers, which builds on this animal's troubled position in the postmodern medical-industrial bestiary as a point of empowerment, and establishes a form of what I call a *transpecies intimacy*. This form of co-emergence that blurs species boundaries can be traced to the much more direct and structured interspecies encounters within the settings of the laboratory or fieldwork. Scientists working with hyenas have clearly defined stakes in this contact, but transpecies intimacy is not necessarily a byproduct of their professional engagement with another species; it pre-exists the experimental situation and affects both parties. The fragile hyena-human interspecies merging critically depends on a series of hierarchical divisions that operate on multiple levels of the bio-capitalist, knowledge-producing joint venture. In being suspicious of the sentimental, idealizing, or romanticizing relation to the hyena as a totalizing gesture, I hope to find “ways to refigure multiplicities outside the geometry of part/whole constraints.”⁵¹²

Hyenas and Their Scientists

My survey of scientific articles from between 1986 to 2013, that involve research on spotted hyenas, reveals that most begin with a description of a female hyena's “odd traits”: its so called “masculinized” genitalia, also referred to as “pseudo-penis,” “pseudo-scrotum,” “penile clitoris,” “peniform clitoris,” or “female phallus,” which are usually further linked to female virility and their dominance in the hyena social structure.⁵¹³ From the above examples, spanning from the fields of

⁵¹¹ I identified three journals: “Hormones and Behavior”, “Endocrinology” and “The Journal of Clinical Endocrinology and Metabolism,” based on the history of endocrinological research on sex hormones outlined in Fausto-Sterling, *Sexing the Body*.

⁵¹² Haraway, *Simians, Cyborgs, and Women*, 1991, 3.

⁵¹³ Place et al., “The Anti-Androgen Combination, Flutamide plus Finasteride, Paradoxically Suppressed LH and Androgen Concentrations in Pregnant Spotted Hyenas, but Not in Males”; Szykman et al., “Courtship and Mating in Free-Living Spotted Hyenas”; Gade, “Hyenas and Humans

behavioral sciences, physiology, ecology, neurobiology, sociobiology, to endocrinology and geography, it is clear that contemporary scientific language fails to account for the hyena's unique anatomical feature without applying clearly gendered meanings to it. As a glitch in the gender binary system, hyena's "female phallus" is described either as atypically masculinized female genitalia, or an imperfect copy of male sex organs. While the vocabulary available within the modern "two-sex model" premised on essential sexual difference does not suffice to describe female hyena's sexual anatomy, the dependence on the pre-eighteenth-century "one-sex model" logic is tangible in the way these contemporary articles stress the similarities between male and female sexual organs, and position masculinization as a vector and a yardstick for anatomical comparison.⁵¹⁴ To resolve this ambiguity and defuse the imbalance created between the sameness and difference principles clashing in biomedical discourses, scientists utilize sex hormones as mobile and versatile explanatory tools for the troubling case of the "female phallus."

After delving into the richness of this institutional context I was able to identify the main actors of the hyena story, with their own competing scientific colonies and heavy exchange in animals, ideas, money, and meanings. I start this historical outline with Frank Ambrose Beach – an experimental psychologist, who was one of the founding fathers of the Field Station for the Study of Behavior, Ecology and Reproduction at the University of California, Berkeley (UCB), which used to hold the only captive research colony of spotted hyenas. Beach is one of the key figures in the history of modern endocrinology, and is especially known for his liberal political views on human sexual diversity.⁵¹⁵

Between 1936 and 1946 Beach was employed at the American Museum of Natural History in New York, where he based a lot of his early research on animal sexuality, and where he first took interest in the effects of sex hormones on behavior. He established and curated the Hall of Animal Behavior, which was an important page in the history of modern endocrinology, and to a certain extent a sign of the fascination with sex hormones imagined as determinants of femininity and masculinity in post-World War II U.S.. During his years at the Museum he audited a

in the Horn of Africa"; East, Hofer, and Wickler, "The Erect 'Penis' Is a Flag of Submission in a Female-Dominated Society"; Hammond et al., "Phylogenetic Comparisons Implicate Sex Hormone-Binding Globulin in 'Masculinization' of the Female Spotted Hyena (*Crocuta Crocuta*)."

⁵¹⁴ Laqueur, *Making Sex*.

⁵¹⁵ Fausto-Sterling, *Sexing the Body*, 206–11.

course on endocrinology at New York University for which he wrote a paper on the hormonal regulation of behavior. This term paper became the basis for his book *Hormones and Behavior*,⁵¹⁶ which is considered foundational for the new discipline of behavioral neuroendocrinology. Later, the Society for Behavioral Neuroendocrinology started publishing a journal under the same title (one of the academic venues I analyzed for this chapter), where most research on the role of sex hormones in female hyenas has been published up to this point.

In a memorial essay for Beach, his colleagues describe him as an innovator and a forward-thinking reformer who attempted to revolutionize the Museum with his insistence on developing laboratory studies of animal mating behavior:

Then in the Reagan years when conservatism swept the country and the wheels of progress went into reverse gear in so many rational pursuits, the Museum decided to return to its traditional role in biology, taxonomy, and systematics. And so, in 1981, with no one to lead the cause, the battle was finally lost; the Department of Animal Behavior came to an inglorious end and with it Frank Beach's dream.⁵¹⁷

But his dream did not die at that time. He managed to move his research to UC Berkeley, where in the 1960s he established a field station for behavioral research near to the university campus, and where his students would soon bring the first spotted hyenas from Kenya.

Beach's position at the museum allowed him to extend his studies to other species including cats, hamsters, marsupials, minks, pigeons, spider monkeys, alligators, and eventually hyenas.⁵¹⁸ Access to live specimens, as well as archives of tissues and fully equipped laboratories was crucial for developing his theory of animal sexuality, which was aimed at locating the origins of animal masculinity and femininity. The overlap between human science of sexology and research on animals became clearly defined through his personal connection to Alfred Kinsey, co-author of the famous *Kinsey Reports* on human sexuality.⁵¹⁹ Both Kinsey and Beach received funding from the Committee for Research in the Problems of Sex established in 1922 within the National Research Council's Division of Medical Sciences with the cooperation of the Bureau of Social Hygiene and support from the Rockefeller

⁵¹⁶ Beach, *Hormones and Behavior*.

⁵¹⁷ Aronson and Zitrin, "At the museum—The Formative Years," 426–27.

⁵¹⁸ *Ibid.*, 425.

⁵¹⁹ Kinsey, Pomeroy, and Martin, *Sexual Behavior in the Human Male*; Kinsey, *Sexual Behavior in the Human Female*.

Foundation.⁵²⁰ Moreover, Kinsey extensively cited Beach's studies on animals to back up his findings in human sexual behavior.⁵²¹ Sexology has had long-lasting stakes in endocrinology, as the earliest conceptualizations of homosexuality as the third sex or a form of psychological hermaphroditism (the idea of homosexuals as feminized males and masculinized females) corresponded with the hypothesis on hormonal imbalance as the origin of homosexual behavior and identity.⁵²²

Mostly known for his laboratory research on rats, Beach accepted a position as a professor of Psychology at UCB in 1958, and continued research on mammalian sexuality and the role of hormones in sexual behavior in different species. A significant shift in his scientific studies on hormones occurred with the establishment of the first and only captive colony⁵²³ of spotted hyenas at UCB in 1984. Until its closing in 2014, this scientific establishment had been the leader in laboratory research on spotted hyenas and specialized in endocrinological studies on hormone-based explanatory models of social behavior. The foundation of the Berkeley hyena field station coincides with Laurence Frank's (one of Beach's students) discovery of a method of differentiating between male and female hyenas, allowing researchers to determine a specimen's sex without waiting for visible pregnancy, lactation, or performing an anatomical dissection.⁵²⁴ This method of sexing the hyenas was crucial for setting up the trajectory of laboratory research with its fixation on sexual difference and the role of hormones in sexual development. Frank, a field biologist working in East Africa, was also the person who organized the capture and transfer of twenty hyena cubs from Maasai Mara to Berkeley. The details of this operation can be found in a report from one of the first studies on the UCB hyenas, and the last experiment designed by Beach prior to his death in 1988. According to the report the cubs were collected from their dens in the Narok District in southwest Kenya, when they were about 2-6 weeks old.⁵²⁵

⁵²⁰ "National Academy of Sciences Archives. Committee for Research in Problems of Sex, 1920-1965."

⁵²¹ Kinsey, Pomeroy, and Martin, *Sexual Behavior in the Human Male*.

⁵²² Oudshoorn, *Beyond the Natural Body*, 56-59.

⁵²³ Naming the scientific field station a "colony" symbolically inverts the typical colonial routes of slave trade, however on the material level nonhuman animal bodies are still trafficked in the same direction.

⁵²⁴ Frank, Glickman, and Powch, "Sexual Dimorphism in the Spotted Hyaena (*Crocota Crocuta*)."

⁵²⁵ Pedersen et al., "Sex Differences in the Play Behavior of Immature Spotted Hyenas, *Crocota Crocuta*," 405-6.

This first study is also an excellent example of research methodology endorsed by Beach, and later taken up by his students – the aforementioned Frank, Stephen Glickman and Kay Holekamp.⁵²⁶ The assumption that hormones directly conditioned behavior is discernible in the experiment design. In this study, five male and five female spotted hyenas were located in a specially designed fenced-in enclosure, where several objects were placed to test their play behavior in same-sex and mixed groups. This activity was being recorded on a surveillance-type video camera. Additionally, two males and two females were gonadectomized (castrated or removed ovaries) at the age of 5-7 months. This step was seen as a necessary component of the experiment design to prove the hypothesis that sex hormones produced by these organs might influence playful behavior in spotted hyenas.⁵²⁷ To understand the apparent need for such a radical method, one needs to backtrack to Beach's earlier experiments on rats. His famous experiments on rodents involved two crucial steps, which were later transposed onto the early hyenas experiments: first, subdividing, defining, and ranking behaviors, which allowed the scientists to count and analyze isolated stages of a more complex behavior (like mating or play) and later testing it for possible influences; and second, introducing an external factor (usually hormone injection or removal of testes/ovaries) in a control group in order to test the hormonal influence hypothesis.⁵²⁸

There is a tangible continuity in the way controlled experimental methods travel between model organisms of different species from guinea pigs, rats, and rabbits, to primates, mares, and freemartins.⁵²⁹ In *Sexing the Body* Anne Fausto-Sterling, a feminist science historian studying the biology of gender development, highlights the “rodent's tale” with lab rats and guinea pigs as main models for the exploration of sex-related behaviors in mammals.⁵³⁰ Within the biomedical lab bestiary hyenas are not the leading protagonists in the history of sex endocrinology.

⁵²⁶ These three researchers coming mostly from the Psychology Department formed the UCB research team on spotted hyenas.

⁵²⁷ Pedersen et al., “Sex Differences in the Play Behavior of Immature Spotted Hyenas, *Crocota Crocuta*,” 403.

⁵²⁸ Beach and Holz-Tucker, “Effects of Different Concentrations of Androgen upon Sexual Behavior in Castrated Male Rats”; Whalen, Beach, and Kuehn, “Effects of Exogenous Androgen on Sexually Responsive and Unresponsive Male Rats”; Wilson, Kuehn, and Beach, “Modification in the Sexual Behavior of Male Rats Produced by Changing the Stimulus Female”; Beach and Wilson, “Mating Behavior in Male Rats After Removal of the Seminal Vesicles”; Beach, Buehler, and Dunbar, “Competitive Behavior in Male, Female, and Pseudohermaphroditic Female Dogs.”

⁵²⁹ Oudshoorn, *Beyond the Natural Body*; Roberts, “Drowning in a Sea of Estrogens,” 198.

⁵³⁰ Fausto-Sterling, *Sexing the Body*, 195–232.

Therefore, instead of arguing for an alternative “hyena’s tale,” I suggest to analyze the traffic in lab animals with careful attention paid to the ways scientific methodologies construct, divide and exchange their research objects. In this way the spotted hyenas in Berkley share a transbiological pedigree with such lab dwellers as Beach’s rats and the OncoMouse™.⁵³¹ It becomes clear that Beach’s research methodology coming from experimental psychology solidified the deterministic understanding of the link between social behavior and hormones – an assumption heavily criticized in feminist science studies.⁵³² His method utilized the female spotted hyena as a model organism for hormonal research on androgens, building on the species’ lack of clear sexual dimorphism as an exception from the mammalian norm, treated as a “natural abnormality.”

Frank continued his teacher’s line of argumentation in his further studies with slight modifications. He initiated and maintained a close connection between the laboratory and the field in Kenya, which resulted in adding an evolutionary approach to the neuroendocrinological explanatory model of sexual difference. For example, one of his articles opens with a startling question: “Why would evolution create a reproductive organ so hazardous that 9-18% of females die during their first birth, and those that survive lose over 60% of their first-born young?”⁵³³ Not only does it put a strong focus on “extraordinary” genitalia, but also frames the analysis according to reproductive costs and benefit evolutionary game. He explains: “Because neither soft anatomy nor behavior leave a fossil record, we do not know when masculinized females first evolved from a more prosaic ancestor.”⁵³⁴ Unusual anatomy becomes a pretext to investigate the reasons behind such an evolutionary adaptation, which is viewed here as a deviation from a norm. Feminist studies in history of sex endocrinology show that the methods of extracting and measuring sex hormones strongly tied femininity to reproduction.⁵³⁵ Thus, through endocrinological research, reproduction and masculinity has been solidified as opposite categories. The spotted hyena as a species with “masculinized” females retaining full reproductive capacities challenged this preconception. Overall, what mostly preoccupies scientists indebted to

⁵³¹ Haraway, *Modest Witness - Second Millennium*.

⁵³² Hausman, “Do Boys Have to Be Boys?”; Fausto-Sterling, *Sexing the Body*; Roberts, “Biological Behavior?”

⁵³³ Frank, “Evolution of Genital Masculinization,” 58.

⁵³⁴ *Ibid.*

⁵³⁵ Schiebinger, *Nature’s Body*; Oudshoorn, *Beyond the Natural Body*; Clarke, *Disciplining Reproduction*.

the evolutionary mode of inquiry is the search for a reason behind the “masculinization” of female genitalia that would be good enough to balance out the high reproductive cost of such adaptation. What is the evolutionary benefit of a “female phallus”?

Extensively citing other studies, Frank reviews several hypotheses for the so called, “female masculinization” in spotted hyenas: *the mimicry hypothesis* (the female’s erect clitoris is supposed to mimic the male “meeting ceremony”⁵³⁶), *the male infanticide hypothesis* (female dominance evolved as a countermeasure to infanticide by males⁵³⁷), *the siblicide hypothesis* (genital masculinization seen as a side effect of prenatal androgen exposure, increasing aggressiveness and therefore serving as an advantage in the neonatal competition between siblings⁵³⁸), *the chastity belt hypothesis* (female anatomy evolved to prevent forced copulation by male spotted hyenas), and *the competition-aggression hypothesis* (under intense feeding competition, female aggressiveness and increased body size is favored, and results from androgen exposure *in utero*⁵³⁹). While hormonal theory is linked to the focus on the female hyena’s genitalia in crucial ways, there is a split in scientific explanations regarding the functionality of the female hyenas’ sexual morphology. One school represented by the Max Planck Institute highlights the evolutionary benefits of the enlarged erectable clitoris, which is seen as a tool for elaborate social organization with a complex choreography of greeting ceremonies and communication patterns.⁵⁴⁰ The other school argues that it is the result of the female fetus’ exposure to high levels of androgens (hormones stimulating development of “male” secondary characteristics) *in utero* – an evolutionary side effect rather than a functional adaptation. The UCB scientists, with Frank and Glickman as some of its most prolific authors, leaned toward the latter, “hormonal” explanation and have been devoted to studying prenatal androgens and their effects on external genitalia, as well as the role of placenta in the endocrine system feedback loops.⁵⁴¹ The hegemony of the hormone-

⁵³⁶ East, Hofer, and Wickler, “The Erect ‘Penis’ Is a Flag of Submission in a Female-Dominated Society.”

⁵³⁷ Kruuk, *The Spotted Hyena; a Study of Predation and Social Behavior*.

⁵³⁸ East, Hofer, and Wickler, “The Erect ‘Penis’ Is a Flag of Submission in a Female-Dominated Society.”

⁵³⁹ Yalcinkaya et al., “A Mechanism for Virilization of Female Spotted Hyenas in Utero.”

⁵⁴⁰ East, Hofer, and Wickler, “The Erect ‘Penis’ Is a Flag of Submission in a Female-Dominated Society.”

⁵⁴¹ Place et al., “The Anti-Androgen Combination, Flutamide plus Finasteride, Paradoxically Suppressed LH and Androgen Concentrations in Pregnant Spotted Hyenas, but Not in Males.”

based explanatory model that cemented itself as an immutable paradigm in biological sciences tends to suppress alternative theories taking into account environmental factors.

“Science Wars”⁵⁴² between two competing research groups continued. Marion L. East and Heribert Hofer from the Max Planck Institute for Behavioural Physiology severely undermine the relevance of data obtained from captive animals and criticize the emphasis put on androgens in the evolution and ontogenetic development of female hyenas’ virilized genitalia. Directly referring to the UCB research team’s studies, East and Hofer argue that androgens levels might be higher in captive than in free-ranging hyenas, whereas aggression might also increase due to elevated frequency of interactions between males and females in an artificial environment.⁵⁴³ In opposition to the UCB scientists, the Max Planck Institute team suggests that rather than assumed “hyperaggressiveness” in females, it is precisely the lack of aggression in male spotted hyenas that deserves further attention. This particular point of tension indicates the specifically gendered character of knowledge production on hyenas.

The tension between studies on captive populations versus free-range animals evidenced above is not a self-evident dichotomy. There is no clear-cut division between the laboratory and the field station. Since its establishment, the UCB colony maintained a relationship with the field station in Kenya, where the Berkeley hyenas originally came from. One of the leading scientists there is Kay E. Holekamp, who obtained her PhD at UC Berkley under the mentorship of Stephen E. Glickman and with Frank A. Beach as a member of her PhD committee. She now works for the Program in Ecology, Evolution, Biology & Behavior at Michigan State University and conducts her research at the Masai Mara National Reserve in Kenya. A photograph of a spotted hyena exposing its enormous teeth in something that could be either a yawn or a laugh welcomes the visitors of her laboratory’s webpage. This is how Holekamp describes her current research focus there:

In one line of research, my students and I are conducting a long-term behavioral field study of free-living spotted hyenas in Kenya. Females exhibit patterns of aggressive and other rank-related behaviors that are reversed from normal mammalian sex roles, and these role-reversals make the spotted hyena an exciting subject for testing hypotheses about the causal factors promoting emergence of behavioral sex differences. Hyena society is remarkably like the societies of many old-world primates, yet carnivores and primate lines diverged over 90

⁵⁴² Latour, *Pandora’s Hope*.

⁵⁴³ East and Hofer, “Conflict and Cooperation in a Female-Dominated Society.”

million years ago. This makes the spotted hyena an outstanding model species in which to test hypotheses about the selective forces shaping the evolution of social behavior and social cognition in mammals.⁵⁴⁴

A continuation of the evolutionary explanation model and an insistence on behavioral studies of hyenas is quite visible in this short research description. More importantly though, in a section titled “Socioendocrinology”, Holekamp explains how her ongoing collaboration with Glickman continues to link the field station in Kenya and the laboratory in Berkley, with captive hyenas used to validate measurements of hormones.⁵⁴⁵

As I demonstrate later in this chapter, sex hormones as chemical substances loaded with gendered meanings can quite easily travel across species boundaries. In this way, what I call *traffic in HumAnimals* can be subtracted into traffic in animal bodily parts. The history of sex endocrinology reveals the indebtedness of this medical discipline to a specifically materialized “economy of parts” – from its origins in organotherapy, a technique of using extracts from animal gonads to inject them into humans for therapeutic and rejuvenating effects,⁵⁴⁶ to the belief that hormones serve as messengers of femininity and masculinity transmitted within the fragmented organism to ensure its homeostasis.⁵⁴⁷ These essentialized sex particles travel between human and nonhuman bodies in the form of material substances and gendered scientific explanatory models. This very partitioning and atomizing of the body facilitates the production of specifically gendered knowledge on hyenas that can be later extrapolated onto humans.

Colony Collapse

The research on spotted hyenas is a multi-sited endeavor. While some of Beach’s students stuck around in the field, or returned to studying wild populations after years of laboratory studies, others devoted their careers to behavioral endocrinology and lab hyena studies at the UCB captive colony.⁵⁴⁸ In this section, I further investigate the hyena-human interspecies relationship by closely analyzing the

⁵⁴⁴ Holekamp, “Kay Holekamp Laboratory.”

⁵⁴⁵ Ibid.

⁵⁴⁶ Borell, “Organotherapy and the Emergence of Reproductive Endocrinology.”

⁵⁴⁷ Medvei, *A History of Endocrinology*; Roberts, *Messengers of Sex*.

⁵⁴⁸ Throughout her career Holekamp continues to research free-living spotted hyenas in Kenya and focuses on behavioral aspects of sex differences. See, <http://hyenas.zoology.msu.edu/>. Meanwhile, Frank turned to wildlife conservation research and directs the Living with Lions program, the Laikipia Predator Project and the Kilimanjaro Lion Conservation Project.

two most recent project summary reports from the UCB hyena colony authored by Glickman titled “The Role of Spotted Hyenas in a One Health World” and “Lessons Learned From Spotted Hyenas: A Scientific Synopsis of the Berkeley Hyena Project.” My aim is to trace institutional and discursive moments of taxonomic tensions. The UCB colony has been established with an explicit intention to study the influence of hormones on social behavior in a controlled environment. Most significantly, the results of endocrinological experiments performed on the captive spotted hyenas are extrapolated onto other mammals, including humans. The colony has been funded by the U.S. National Institute for Health (NIH) and the National Science Foundation (NSF) – two major governmental agencies for biomedical research. Both reports have been created to seek financial support for sustaining the field station, which became endangered due to cuts in research funding. After three decades it was closed down in 2014 and the remaining thirteen animals have been relocated to zoos. I believe that the character of the two analyzed reports, which are a record of the efforts to save this research facility, gives a unique insight into a condensed form of legitimizing the usefulness of a particular species for scientific research that aspires to benefit humans.

The task undertaken in the two analyzed reports is challenging: how to advertise a research facility using a poster species that is commonly despised as ugly, disgusting, sneaky, and vicious? Popular representations of hyenas as villains and repulsive scavengers interplay in an image of this species as an oversexualized, boundary-crossing, shape-shifting, monstrous creature. This portrayal is evident in scientific descriptions of biological processes that are supposed to explain hyenas’ uniqueness and assert their usefulness for human knowledge production, as well as its further applications in public health. Anna Wilson in her article “Sexing the Hyena: Intraspecies Readings of the Female Phallus” argues that despite the efforts to demystify hyenas and recuperate their reputation by recent scientific studies, these new knowledge products still tend to reiterate old representations based on the depictions of animals’ sexuality and gender expression framed as aberrant and abnormal.⁵⁴⁹ What she calls the “historical hyena” still haunts new sciences.⁵⁵⁰ To frame their research and add an aura of mystery, scientists frequently refer to Pliny and *Physiologus* among many medieval bestiaries, drawing on different interpretations of hyenas’ assumed hermaphroditism or the annual sex-change

⁵⁴⁹ Wilson, “Sexing the Hyena,” 757.

⁵⁵⁰ *Ibid.*, 758.

behavior theory. They cite worn-out excerpts from Theodore Roosevelt and Ernest Hemingway along with their modernist white hunter's hierarchy of game animals,⁵⁵¹ where hyenas are presented as pervert, pitiful, gregarious scavengers – nothing more than a “dirty joke, ... hermaphroditic self-eating devourer of the dead.”⁵⁵² Wilson highlights that cultural taboos involving hyenas are remarkably portable across cultures: ranging from the pre-Islamic Arabic poetry depicting hyenas devouring human corpses and copulating with dead bodies while menstruating;⁵⁵³ to African sources portraying the animals as dangerous, greedy, and toxic creatures polluting human settlements; to Western early-Christian accounts focusing on the animals' promiscuity and sexual ambiguity described as “an alternating male-female ... unclean because it has two natures.”⁵⁵⁴ This particular species has been historically constructed as a threatening, bizarre, ferocious and repulsive beast whose liminal nature disrupts the “natural order.”

To counterbalance this unflattering image, throughout the entire narrative of the UCB reports, hyenas are portrayed as unique, atypical, intelligent, and resilient nonhuman animals – “an absolute biological masterpiece.” The text also highlights the affectionate relationship between the researchers and the “spotties” by mentioning that the cubs were bottle-reared by Frank and Glickman themselves, and thus, giving a cute, personal (and familial normative) twist to the transpecies intimacy. Turning hyenas' bad fate around seems to be a mission shared across other contemporary institutions involved in research on this species whether in the laboratory, or in the wild. However, this seemingly noble task is not that innocent. Under closer investigation the “enlightened” scientific perspective positions itself against the prejudiced representations of hyenas rooted in “traditional folklore,” that further endangers the animals treated as vermin in their habitats. The “savior approach” is evidence of colonial longings that mark this perspective as embedded in the Western scientific project of recuperating hyenas' reputation. For example, an online eulogy to the UCB colony starts with a dramaturgically built aura of danger and a note of nostalgia for a safari-like experience at the Berkeley campus: “What Berkeleyite has not heard them, hooting and gibbering at twilight across the East Bay hills? As the romance novelists might say, it sent a frisson down your spine, made you somehow

⁵⁵¹ Haraway, “Teddy Bear Patriarchy,” 1989.

⁵⁵² Hemingway, *Green Hills of Africa*, 38.

⁵⁵³ Stetkevych, “Sarah and the Hyena.”

⁵⁵⁴ Curley, *Physiologist*, 52–53.

feel that you were an early hominid on the African veldt, vulnerable to large and toothy predators.”⁵⁵⁵ In this dramatic depiction, the hyenas, some of which were transported to California only thirty years ago, seem to belong to a “dark,” prehistoric continent ruled by its dangerous and mysterious wildlife. These lab animals become part of the Western wildlife conservation project that remains deeply invested in colonial imaginations of Africa as a land of wondrous beasts, which are made available for disenchantment with the rationalist tools of scientific objectivity. Hyenas become inscribed in one of the exoticizing origin stories.

I agree with Wilson that modern natural sciences continue to recycle the main tropes of the hyena as a peculiar and fascinating deviation from gender norms by focusing on its specific features framed in terms of sexual excess and/or aberration. The negatively charged cultural representations of their sexual ambiguity forms a background against which scientists try to dispel stereotypes about the animals’ dual nature. At the same time, building on those tropes incorporates them into their explanatory models about sex and gender. The findings from scientific research on hyenas, and especially the role of hormones in their genital development and sexual behavior, are paralleled with cultural debates on gender expression and identity in humans.

Human health is at the forefront in both reports among the many reasons why one should support the UCB hyena colony.⁵⁵⁶ In this account the colony gains the status of a “biological treasure,”⁵⁵⁷ and its loss would have tremendous consequences for scientific progress in medicine. The most precious jewels in this treasured research facility are the androgens. The Berkeley field station had been a pioneering institution in manufacturing scientific truths about hormones as the key organizing substances for the sex/gender systems, turning these chemical substances into an essentialized gender juice. Feminist historians of science show how the definition of sex hormones and their role in biology of the organism changed over time and was influenced by the

⁵⁵⁵ “Hyena Heave-Ho.”

⁵⁵⁶ Among other reasons, hyenas are named “the great defenders” as their unique resistance to pathogens promises to save the U.S. nation from terrorist attacks with the use of the biological weapon Anthrax. According to the report, another threat, the “superbugs” – species of bacteria that have developed immunity to antibiotics – can also be defeated thanks to research on hyenas. In this sense hyenas become agents in the biopolitical spectacle of contagion, panic over toxic threat and thus, help building the idea of national sovereignty. The national body politics seeks salvation in a nonhuman animal body of the hyena. Mel Chen notes that “... toxins participate vividly in the racial mattering of locations, human and nonhuman bodies, living and inert entities, and events such as disease threats” Chen, *Animacies*, 2012, 10.

⁵⁵⁷ Glickman et al., “The Role of Spotted Hyenas in a One Health World,” 2.

disciplinary background of the researchers coming from a variety of fields such as physiology, obstetrics, gynecology, sexology, chemistry, embryology, and zoology.⁵⁵⁸ Nelly Oudshoorn highlights the split between biological and biochemical perspectives in sex endocrinology, with the first one conceptualizing hormones “as sexually specific agents, controlling sexual characteristics,” and the latter framing them “as catalysts: chemical substances, sexually unspecific in origin and function, exerting manifold activities in the organism, instead of being primarily sex agents.”⁵⁵⁹ The most prevalent conceptualization of sex hormones comes midway between these two oppositional traditions, but leans towards the sex-specific interpretation. According to Celia Roberts, “despite the attempts to complexify the oppositional gender discourses of earlier endocrinology, these contemporary scientists end up making quite simple claims about the role of hormones in producing sex and gender in humans.”⁵⁶⁰ Fausto-Sterling argues that “... by defining as sex hormones what are, in effect, multisite chemical growth regulators, thus rendering their far-reaching, non-sexual roles in both male and female development nearly invisible,”⁵⁶¹ researchers managed to inscribe gendered regimes into human bodies with more precision and depth than ever before.

In the scientific synopsis of the Berkeley Hyena Project, Glickman, who served as the station’s director in its last years, argues that the National Institute for Health “supported the project for many years because there are human medical conditions, where girls are born that appear to be boys, or adolescents have difficulty with impulse control and, in both cases, it was believed that studying hyenas might reveal novel male hormones and/or potential sources of such hormones that could account for such problems.”⁵⁶² He refers here to a genetic condition known as congenital adrenal hyperplasia (CAH) affecting girls exposed to high levels of androgens in utero. They are common research subjects for behavioral psychologists studying the relation between hormones and gendered behavior.⁵⁶³ The language of medicalization and pathologization of intersexuality and transsexuality is prevalent in the way scientific narratives in hyena research are constructed. This reinforces ableist

⁵⁵⁸ Oudshoorn, *Beyond the Natural Body*; Fausto-Sterling, *Sexing the Body*; Roberts, *Messengers of Sex*.

⁵⁵⁹ Oudshoorn, *Beyond the Natural Body*, 36.

⁵⁶⁰ Roberts, “Drowning in a Sea of Estrogens,” 199.

⁵⁶¹ Fausto-Sterling, *Sexing the Body*, 147.

⁵⁶² Glickman, “Lessons Learned From Spotted Hyenas A Scientific Synopsis of the Berkeley Hyena Project,” 1.

⁵⁶³ Rogers, *Sexing the Brain*; Roberts, “Drowning in a Sea of Estrogens,” 198.

norms of sexual embodiment and even propelling moral panic about the possible environmental factors influencing the early development of sexual characteristics or affecting fertility, which usually remains concerned with environmental estrogens.⁵⁶⁴ In both reports from the UCB colony, human intersex and trans embodiment is referred to as a “developmental pathology” and “birth defect,” framed as problems that can be solved with progress in medicine, critically dependent on the hyena research, which investigates the role of hormones on sexual development.

Given that many studies on hormones reviewed here tend to pathologize gender-non-conforming embodiment in both human and nonhuman animals by equating it to a defect or disease,⁵⁶⁵ the human-hyena interspecies merging becomes a tool for translating biological states into cultural-societal meanings through medical discourses and scientific methods. In the following section I investigate in more detail the gendered relations between hormones, humans, and hyenas that surface in the cross-breeding between endocrinologists, behavioral psychologists, wildlife conservation biologists, pharmaceutical companies, and North American health agencies.

Hormonal Trans-Speciatiions

The spotted hyena was foremost selected for research in endocrinology due to the species’ lack of visible sexual dimorphism, which is assumed to be typical of most mammals. Furthermore, as I demonstrated in the section mapping out the UCB research team’s roots in behavioral psychology, female hyenas’ sexual anatomy has been linked to social organization and gendered behavior that seems to invert the mammalian “norm” of male dominance. Hyenas are highly social carnivores, with an elaborate hierarchy that follows matrilineal ranking. Researcher Laura Smale, a recipient of the prestigious Frank A. Beach Award and a field collaborator of the Berkley Hyena Project in Kenya, identifies these traits as an opportunity for a unique research design: “An animal exhibiting a pattern that does not conform to mammalian norms provides the opportunity to examine the development of sex differences from a new vantage point.”⁵⁶⁶ Does this new perspective affect the norm itself?

⁵⁶⁴ Kier, “Interdependent Ecological Transsex”; Roberts, “Drowning in a Sea of Estrogens.”

⁵⁶⁵ For example, the polycystic ovarian syndrome in human females is being compared to female hyenas morphology.

⁵⁶⁶ Smale, “Frank A. Beach Award. Male-Female Dominance Relations at Three Ontogenetic Stages in the Spotted Hyena (*Crocuta Crocuta*),” 127.

In most scientific studies I analyzed, the hyena is constructed as an aberration, a deviation from the “natural” order of things, and therefore serves as a perfect model organism for scientific experimentation. Moreover, high levels of androstenedione (precursor hormone for both estrogens and testosterone) produced by female hyenas’ ovaries put this species at the forefront of endocrinological inquiries into sex differences. According to Wilson, “(v)iewed as ‘nature’s experiment,’ the spotted hyena is a naturally occurring defect that enables both morphological and behavioral study of the removal of (normal) male dominance and the administration of androgens to females.”⁵⁶⁷ Many studies identify the peculiarity of female spotted hyenas as a scientific resource to be exploited and contrasted against other species’ reaction to hormonal treatment that is seen as following a typical, “normal” path.⁵⁶⁸ In one of the studies scientists were exploring sexual differentiation in three species, which they called “unconventional” mammals.⁵⁶⁹ They were unconventionally bending gender roles. The spotted hyena was described as “exotic” and “non-traditional,” as if there was some interspecies tradition of normalcy, which the rebellious hyenas refuse to follow. What is this “mammalian norm” against which the hyenas are being compared?

Most of the studies on sexual differentiation in the spotted hyena aim at challenging the prevailing model of sexual development in mammals proposed by Alfred Jost – a French embryologist who studied animal sexuality between 1947 and 1973. His groundbreaking experiments on androgen and estrogen effects on early fetal rabbits became widely recognized after he formulated his model of mammalian sexual development, which to a large extent persists in scientific thought today. In the late 1940s and early 1950s, Jost performed a series of experiments on rabbit fetuses, which involved *in utero* surgical removal of gonads and hormone injections. His findings were revolutionary for the ongoing debates in endocrinology on the hormonal origins of masculinity and femininity, and featured two active substances involved in early male sexual development. In Jost’s model of hormonal control, feminine characteristics will develop in absence of testosterone, which is required for the development of male characteristics with another substance responsible for suppressing the development of female structures (later identified as anti-Müllerian

⁵⁶⁷ Wilson, “Sexing the Hyena,” 771.

⁵⁶⁸ Place et al., “The Anti-Androgen Combination, Flutamide plus Finasteride, Paradoxically Suppressed LH and Androgen Concentrations in Pregnant Spotted Hyenas, but Not in Males,” 457.

⁵⁶⁹ Glickman, Short, and Renfree, “Sexual Differentiation in Three Unconventional Mammals.”

hormone). According to Jost “in males, femaleness has to be repressed and maleness imposed by the testes.”⁵⁷⁰

Since Jost, male sexual differentiation came to be understood as an active result of the secretions of the fetal testes, while female phenotype could only develop in the *absence* of androgens. At a conference in 1969, Jost said that: “Becoming a male is a prolonged, uneasy and risky adventure; it is a kind of struggle against inherent trends toward femaleness.”⁵⁷¹ Jost’s model was subsequently applied to explain sexual differentiation of the brain and behavior. The implications of his theory on studies in sex endocrinology were significant. It inscribed well into a commonly acclaimed patriarchal dichotomy between femaleness as a lack and maleness as a presence. Consider how Frank describes the female hyena’s sexual anatomy in his article: “The female has no external vagina; rather, the urogenital canal traverses the hypertrophied clitoris, which resembles a penis in size, shape and erectile ability. The glans clitoridis differs from the glans penis in being **blunt** rather than pointed and **lacking** a distinct constriction at the base”⁵⁷² (*emphasis mine*). Whereas males are equipped with a sharp/pointed penis, females, even with an anatomy that makes it difficult to distinguish them from males, are described as having merely blunt sexual organs that still lack something in comparison to their male counterparts’ genitals.

In terms of the role of hormones in the mechanisms of mammalian sexual development, the spotted hyena challenges Jost’s formulation, because females develop elongated, erectile external genitalia prior to gonadal differentiation. Jost’s model serves as background against which sexual development in the spotted hyenas is studied.⁵⁷³ It also leads scientists to study the effect of hormones *in utero* and adds another organ to the hyena bodily pieces featured as formative for the theories about gender and sexuality – the placenta. In a study aimed at testing the hypothesis of placental metabolism taking an active role in controlling the levels of hormones, a mixture of anti-androgens (chemical substances blocking the effects of androgens) was administered to pregnant hyenas at the UCB field station. The scientists speculated that “such treatment might produce the first female spotted hyena with an external vaginal opening and a ‘typical’ female clitoris, no longer penetrated to the tip

⁵⁷⁰ Jost, Price, and Edwards, “Hormonal Factors in the Sex Differentiation of the Mammalian Foetus [and Discussion].”

⁵⁷¹ Fausto-Sterling, *Sexing the Body*, 199.

⁵⁷² Frank, “Evolution of Genital Masculinization,” 58.

⁵⁷³ Glickman, Short, and Renfree, “Sexual Differentiation in Three Unconventional Mammals,” 405.

by a central urogenital canal.”⁵⁷⁴ To their surprise, a scrotum and a phallus developed in both male and female offspring. However, some significant effects have been observed. In males, both external and internal phallic morphology has been “feminized.” Interestingly, when it comes to females the scientists concluded that “exposure to anti-androgens *in utero* enhanced ‘feminine’ characteristics of the clitoris,”⁵⁷⁵ meaning that these cubs were born with a smaller clitoris. Thus, for females *enhancing* femaleness equals *reducing* the phallus. The same study describes the masculinization of female genitals, that is a typical characteristic in this species, as “dramatic,” and the hyena’s birth canal that leads through the hypertrophied clitoris as “torturous.”

One of the most recent studies on UCB hyenas suggests that both androgens and estrogens “may operate as organizing agents during fetal life, or activating agents during different stages of postnatal life, and might attenuate or reverse traditional male-biased sexual dimorphism in various regions of the brain and spinal cord,”⁵⁷⁶ thus, directly linking the levels of androgens to the assumed neurological sex differences. In this, as well as in other studies, the drive to conduct experiments on spotted hyenas in order to discover the mechanisms responsible for female masculinization is in large part dictated by its possible applications to humans.⁵⁷⁷ However, all of the articles analyzed here refer to two clinical cases, in which genetically female human infants were born with masculinized genitalia.⁵⁷⁸ The explanation of such an intersex condition was traced to a mutation that prevented the human placenta from converting maternal androgens into estrogens. Conte (*et al.*) directly refer to the studies on female spotted hyenas as useful in supporting their hypothesis involving placental metabolism. In other medical studies intersex and transgender conditions, which are believed to result from an *in utero* masculinization processes, are compared to the mechanisms studied in spotted hyenas.⁵⁷⁹ One study

⁵⁷⁴ Glickman et al., “Mammalian Sexual Differentiation: Lessons from the Spotted Hyena,” 352.

⁵⁷⁵ Ibid.

⁵⁷⁶ Hammond et al., “Phylogenetic Comparisons Implicate Sex Hormone-Binding Globulin in ‘Masculinization’ of the Female Spotted Hyena (*Crocuta Crocuta*),” 1436.

⁵⁷⁷ Glickman et al., “Mammalian Sexual Differentiation: Lessons from the Spotted Hyena,” 352; Glickman, Short, and Renfree, “Sexual Differentiation in Three Unconventional Mammals,” 406.

⁵⁷⁸ Shozu et al., “A New Cause of Female Pseudohermaphroditism”; Conte et al., “A Syndrome of Female Pseudohermaphroditism, Hypergonadotropic Hypogonadism, and Multicystic Ovaries Associated with Missense Mutations in the Gene Encoding Aromatase (P450arom).”

⁵⁷⁹ For example, a study co-authored by Glickman, which cites research on the UCB hyenas, examines clinical cases of human children with a null mutation of the aromatase gene, multicystic ovaries, and hypergonadotropism, and juxtaposes it with the findings on the *in utero* virilization mechanisms in the

suggests that the case in which the fetus that the clinicians believe to “really” be a girl, is “*at risk* of androgen-induced female pseudohermaphroditism” (emphasis mine).⁵⁸⁰ By referring to these cases as “female pseudohermaphrodites,” the study not only recycles nineteenth-century medical categories,⁵⁸¹ but also pathologizes human intersex and transgender conditions. Therefore, intersex and transgender people are believed to be suffering from an early developmental abnormality that can be “corrected” with the advancement in medical studies, which hyenas have played a crucial role: “These observations provide a dramatic illustration of the critical importance of human placental and fetal hepatic aromatase in protecting female fetus and the mother from exposure to excessive amounts of testosterone of either fetal or maternal origin.”⁵⁸² Those “abnormal” levels of androgens, or the sea of testosterone in the womb, are presented as threatening conditions.

Biological discourses and their popularizations exploit nonhuman animals both symbolically and materially as rich referents to human gender and sexuality, and some species play a key role in these processes. These discourses rely on the atomization of the experimental body, with specific organs as loci of animal sex being much more portable across species boundaries as fragments. However, which organ ends up holding the symbolic power of an ultimate gender marker depends on its relative value within the traffic in HumAnimals. It does not necessarily have to be genitalia, but a mane, a substance circulating in the bloodstream like hormones, or another element inherent to the body like the genetic code. In this section I have focused on the role of hormones in establishing the spotted hyena as a model organism for biomedical hormone-behavior research, building on its species-specific characteristics. Whereas the use of animal models in research on sex hormones that condition sexuality in humans has been criticized by feminist science studies scholars for its reductionism and linearity,⁵⁸³ in the next section I wonder about the possibility of forging alternative transpecies models for de-pathologizing trans and intersex embodiment outside of the laboratory protocols.

spotted hyena I reviewed above. Hammond et al., “Phylogenetic Comparisons Implicate Sex Hormone-Binding Globulin in ‘Masculinization’ of the Female Spotted Hyena (*Crocuta Crocuta*).”

⁵⁸⁰ Grumbach and Auchus, “Estrogen,” 4690.

⁵⁸¹ Fausto-Sterling, *Sexing the Body*, 50.

⁵⁸² Grumbach and Auchus, “Estrogen,” 4690.

⁵⁸³ Doell and Longino, “Sex Hormones and Human Behavior”; Fausto-Sterling, “Animals Models for the Development of Human Sexuality.”

Transpecies Intimacies

What are the implications of nonhuman animal stories that I analyzed (along with their perpetual blending with human animal stories) for transness understood as a lived experience of persons who resist or transgress clearly defined gender categories? What are the stakes in introducing those stories? The interpretative patterns that couple nonhuman and human materiality through medical and scientific discourses shape our understandings of trans embodiment and ontologically re-create it. The way transness functions as an analytical category within the scholarship that integrates it into animal studies seems to emerge along various theoretical traditions, ranging from new materialist perspectives, through science studies approaches, to biopolitical analyses. For instance, the composite term “tranimals”⁵⁸⁴ functions as a potent crossbreed between the epistemological metaphor of the *rhizome*⁵⁸⁵ overgrowing boundaries, hierarchies, and resisting chronologies; and the *animot*⁵⁸⁶ as a neologism introduced to destabilize the uneven human/animal divide. To follow spotted hyenas within the traffic in HumAnimals entails exploring shared tranimal records within (and beyond) medical protocols via different routes: the way scientific methodologies travel between species, the material trail of hormones circulating between human and animal experimental bodies, and the symbolic circuits of masculinity and femininity carried along certain hormones. I am interested in tracking “transpecies intimacy” that in my analysis binds hyenas with trans and intersex persons, as well as hyenas with the scientists who work with them in the lab and the field.

Among a few studies directly addressing transness and animality,⁵⁸⁷ the intimate links are highlighted specifically in relation to domestic animals and the affective labor of human-pet relationship. Harlan Weaver researches the complex web of queer affective attachments between pit bulls and their humans (owners, shelter workers, animal rights advocates) that are enmeshed in the production of racialized masculinities.⁵⁸⁸ In his autobiographical work he uses the notion of “trans* affect” to explain how his pit bull-type companion dog facilitated his safety in public spaces

⁵⁸⁴ Kelley and Hayward, “Carnal Light.”

⁵⁸⁵ Deleuze and Guattari, *A Thousand Plateaus*.

⁵⁸⁶ Derrida, *The animal that therefore I am*.

⁵⁸⁷ For an overview of scholarship coming at the crossroads of trans and animal studies, see Booth, “Locating a Tranimal Past A Review Essay of Tranimalities and Tranimacies in Scholarship.”

⁵⁸⁸ Weaver, “Pit Bull Promises Inhuman Intimacies and Queer Kinships in an Animal Shelter.”

during transition.⁵⁸⁹ Weaver also develops the concept of “trans species” to show how “trans formations are connected to and made possible by relationships among humans and nonhuman animals that productively disrupt heterosexual gender norms and kinship formations.”⁵⁹⁰ Natalie Corinne Hansen analyzes cross-species and cross-gender identities in a literary representation of a human-horse relationship, where according to her, the subject employs an “... understanding of transsexual difference as a type of technologically mediated naturalization.”⁵⁹¹ In the story she describes, hormones play key role as intermediary actants⁵⁹² in an interspecies relationship, where the assumed horse’s reaction to its owner’s hormonal treatment is interpreted as granting authenticity to transsexual embodiment and experience. Hansen concludes: “As work in animal studies explores how nonhuman animals assert their subjectivity and agency within relations with humans, there are calls within trans-studies for transsexual subjects to articulate their own experiences apart from definitions allotted by the medical establishment, with its central role in actualizing transsexual transition.”⁵⁹³ She refers to the process, in which to be eligible for a gender reassignment surgery many trans people need to become patients and adopt a narrative about their own bodies that is imposed by the medical diagnostics. Through the category of Gender Identity Dysphoria (GID) this medical discourse often frames pre-surgery trans bodies as a “wrong” bodies that must be corrected and fixed into a binary gender system, a procedure that also affects intersex bodies usually at an early stage of life. How can trans-animality become useful in depathologizing trans and intersex embodiment? Can the spotted hyena as a species already folded into the medical system, and one not as close to everyday experience as any domestic animal, become an ally in the trans politics of self recognition?

To resist the pathologization of trans embodiment in medical discourses one might actually learn some lessons from the hyenas. Eva Hayward suggests one can draw lessons from a starfish – both as a potent metonymy (as used in a song she analyzes) and as a very material, carnal presence of a nonhuman animal in language, allowing for carving out an eco-cultural niche for inter-somaticity.⁵⁹⁴ Similarly, the

⁵⁸⁹ Weaver, “The Tracks of My Tears.”

⁵⁹⁰ Weaver, “Trans Species,” 253–54.

⁵⁹¹ Hansen, “Humans, Horses, and Hormones,” 92.

⁵⁹² Latour, “On Actor-Network Theory.”

⁵⁹³ Hansen, “Humans, Horses, and Hormones,” 99.

⁵⁹⁴ Hayward, “Lessons from a Starfish,” 262.

transpecies mattering in the case of hyenas and humans is constructed not only via language: its implications transgress the linguistic framework through scientific knowledge production that affect epistemology, ontology, and the material reality of the human and nonhuman parties in this transpecies relationship. Even though, spotted hyenas are subjected to experimental methods of producing scientific facts about sexual differentiations via hormones, their bodies are not as easily framed in the truths of the gender binary as the scientists might wish to prove. Furthermore, the same (or nearly the same) steroid molecules, which circulate in the bloodstream of spotted hyenas under strict laboratory surveillance, have become useful tools for transsexual masculinizing bodies.

As Hayward reminds, “animal experimentation and instrumentalization are enmeshed in the genealogies of becoming transsexual.”⁵⁹⁵ For hyena-human affinity this inter-somaticity mediated through hormones is less direct than in the case of human-horse relationship through Premarin – a commonly used estrogen medication based on steroids isolated from the urine of pregnant mares.⁵⁹⁶ Hyena bodies are not used for androgen production – they are experimental bodies for producing scientific knowledge about sexual differentiation and this way are integral for trans and intersex being. As a paradoxical “natural abnormality,” hyenas are potentially an important species for redefining naturalness, authenticity, and artificiality of trans embodiment.⁵⁹⁷ Transpecies intimacy in this case is not to be understood as direct contact established through physical proximity – it is rather heavily mediated by scientific practice. A shared kinship, which manifests itself in fleshy multispecies genealogies of becoming and in “queer” disruptions of the normative orders of mammalian anatomies, social structures and its scientific interpretations, ties some humans and hyenas in an intimate relationship at a distance.

Lived experiences of persons under hormonal replacement therapy prompt questions on the consequences of dissecting medical discourses on hyenas for human transgender and intersex politics. The inadvertent power of these scientific discourses lies partly in providing materials and praxes for transitioning, and in holding open a possibility for rewriting trans and intersex genealogies if hyenas are treated not just as experimental organisms, but rather as experimental co-organisms. The “natural”

⁵⁹⁵ Hayward, “Spider City Sex,” 228.

⁵⁹⁶ Haraway, “Awash in Urine.”

⁵⁹⁷ Hird, “Animal Transex.”

occurrence of an embodiment defying and ridiculing sexual dimorphism on a species level calls into question not only the minoritarian character of trans and intersex, but also very the ontology of sexual difference. The challenge lies in resisting the domestication of queerness that might come along with the desire to naturalize it for political goals without enough attention paid to the biopolitical underpinnings of the human/nonhuman interface. Medical-scientific discourses and practices involving hyenas form a framework for technopolitical production of the body and subjectivity, where surgical, endocrinological, sexological, and psychological techniques of biopower⁵⁹⁸ are indebted to the humanimal history of capons, CAH girls, Beach's hormone-injected rats, "true hermaphrodites," Jost's spayed lab rabbits, the circus "Bearded Lady," powdered ovaries of guinea pigs, female spotted hyenas, menopausal women, a urinal cocktail from pregnant women, male police officers, pregnant mares, and stallions. I see this kind of molecular interconnection that binds human and nonhuman bodies through a series of medical trials, laboratory experiments, castration/spaying procedures, medical standardization, corrective surgery, chemical extractions, and hormonal injections as necessarily involved in biopolitical practices of public health regulation.

In the classic Foucauldian conceptualization of biopower, the "... sudden emergence of the naturalness of the species within the political artifice of power relation is something fundamental."⁵⁹⁹ Although this shift from the repressive power with its right to kill towards regulatory power of cultivating the production and reproduction of species' bodies refers to the human species as the main subject of modern governance, the incorporation of biological features of the citizens into the realm of politics had crucial consequences for re-territorializing the human/nonhuman divide and the sex/gender system. There is no uniformity with which the human is hailed here as a universal category. Nonhuman animal bodies become what Susan Stryker and Nikki Sullivan call the "biopolitical resource" integrated into the larger power apparatus; an archive for capitalist appropriation of these bodies for population politics that focuses on "health", well-being, and reproduction.⁶⁰⁰ After all, hyenas as model organisms for endocrinological research are utilized in the name of human health.

⁵⁹⁸ Foucault, *The History of Sexuality*.

⁵⁹⁹ Foucault, *Security, Territory, Population*, 22.

⁶⁰⁰ Stryker and Sullivan, "King's Member, Queen's Body."

As I show throughout my analysis, these normative processes of somatization and speciation compel certain body parts and bodily fluids to get re-invented by the medical-scientific complex and coat them with a thick layer of cultural meanings. Unpacking those layers and putting them into context helps in revealing the subtle power operations intimately binding human and nonhuman bodies in very tangible ways. By this intimate connection I do not only mean the intersex and trans bodies implicated by the medical practices designed to extract portable and profitable scientific facts from research on hyena bodies, but also the scientists who are performing those practices and whose bodies come in direct contact with the hyenas.⁶⁰¹ “Transpecies intimacy” manifests during the bottle rearing of hyena cubs, preparing them for another experiment, spreading hyena’s thick fur to find a spot for piercing the skin with a needle, fixing a radio-collar on its neck, or gently handling a hyena skull. All the scientists I have described in this chapter consider themselves huge fans of the spotties, unanimously admiring their uniqueness, resilience, hunting skills, complex social structure, and unobtrusive beauty. Thus, they are actively engaged in combating hyena’s reputation as vermin. Glickman claims to have bonded with the spotted hyenas during his fieldwork in Africa and through close contact at the UCB station: “as the result of rearing them and watching their individual lives and personalities unfold, we have formed attachments.”⁶⁰²

Similarly, the initial interest in hyenas, which I think can be shared between scientists linking their career paths to this species and any non-professional recognizing hyenas as allies, plays a crucial role in establishing a transpecies intimacy. In an interview for the *Smithsonian* magazine Holekamp admits that what prompted her fascination in spotted hyenas was their gendered social behavior: “by studying an animal that seems to contradict the usual rules you can shed light on what the rules really are.”⁶⁰³ As I describe in chapter 2, this dialectic relationship between the norm and its outside is always at work in scientific explanation of sexuality and

⁶⁰¹ My perspective builds on Haraway’s take on shared response-ability in the experimental lab that redefines both people and animals as subjects of an (asymmetrical) instrumental intra-action, as well as its application in fieldwork conducted by Hayward in marine lab, where human/cup-coral encounters transform human understandings of sense and sense-making. See, Haraway, *When Species Meet*, 2008, 71; Hayward, “Fingeryeyes.”

⁶⁰² Glickman, “The Spotted Hyena from Aristotle to the Lion King,” 531.

⁶⁰³ The same article reveals that Holekamp and Smale are not only lab and fieldwork collaborators, but also life partners. Could their same-sex relationship affect this “transpecies intimacy,” or vice versa? Kemper, “Who’s Laughing Now?”

sexual difference. However, the occurrence of transpecies intimacy is not automatically a guarantee for disrupting the rules of the scientific game, experimental design, or its naturalizing tendencies.

Importantly, in celebrating the hyena-human “transpecies family reunion,” one must be attentive to the many layers of human appropriations of nonhuman bodies and the optics of modern science that provide a very specific and particular type of vision. Even though the scientific optics I criticize here from the standpoint of feminist science and technology studies might leave out multiplicities and ruptures inherent to the discourses on hyenas and hormones, it is crucial to bear in mind that some trans people’s lives depend on this vision, because biomedical research links them with access to healthcare. It is not my intention to create a new hierarchy or bestiary of posthuman bodies, but rather to trace moments of tension and convergence between discourses that allow for avoiding the romanticizing encounter with the nonhuman as simply a sign for “nature”, “the real” or “the authentic.” As Neel Ahuja warns in his book *Bioinsecurities*, “romantic notions of the otherness of environments and species are entirely compatible with forms of government aimed at imperial containment.”⁶⁰⁴ In the case of spotted hyenas, their uniqueness is harnessed by biomedical discourses and practices for the purpose of containing the categories of sex and sexuality.

Hyena’s Laughing

To further explore the ways transpecies intimacies manifest, I conclude with an example of a cultural production that aims at hijacking the hyena story to reclaim it for a queer-feminist struggle. While browsing the archives in search for another scientific article on hyenas I came across a fanzine titled *Laugh of the Stri(p)ped Hyena*, which is a result of a collaborative work between two feminist artists, Val Rauzier and Adi Đukič. With punk Do-It-Yourself aesthetics and a radical message, this artistic piece manages to make political use of the ontological and epistemological tension inherent to the hyena and human interspecies relationship. For the authors, “the pejorative reading (or misreading) of the animal’s behavior reveals the strategies of patriarchal propaganda.”⁶⁰⁵ It is not the hyena herself, but

⁶⁰⁴ Ahuja, *Bioinsecurities*, xv.

⁶⁰⁵ Rauzier, “Stri(p)ped Hyena Laughing,” 21.

rather the discourses that have overgrown the animal that become the protagonist of the zine. I found one of its graphics especially rich in moments of transpecies tension (Fig. 5). An image of a hyena with her powerful teeth exposed in what could be laughter or a warning sign for potential attackers is framed with a handwritten halo saying “fairy tales by furry tails.” The text below is a sarcastic quiz asking the reader

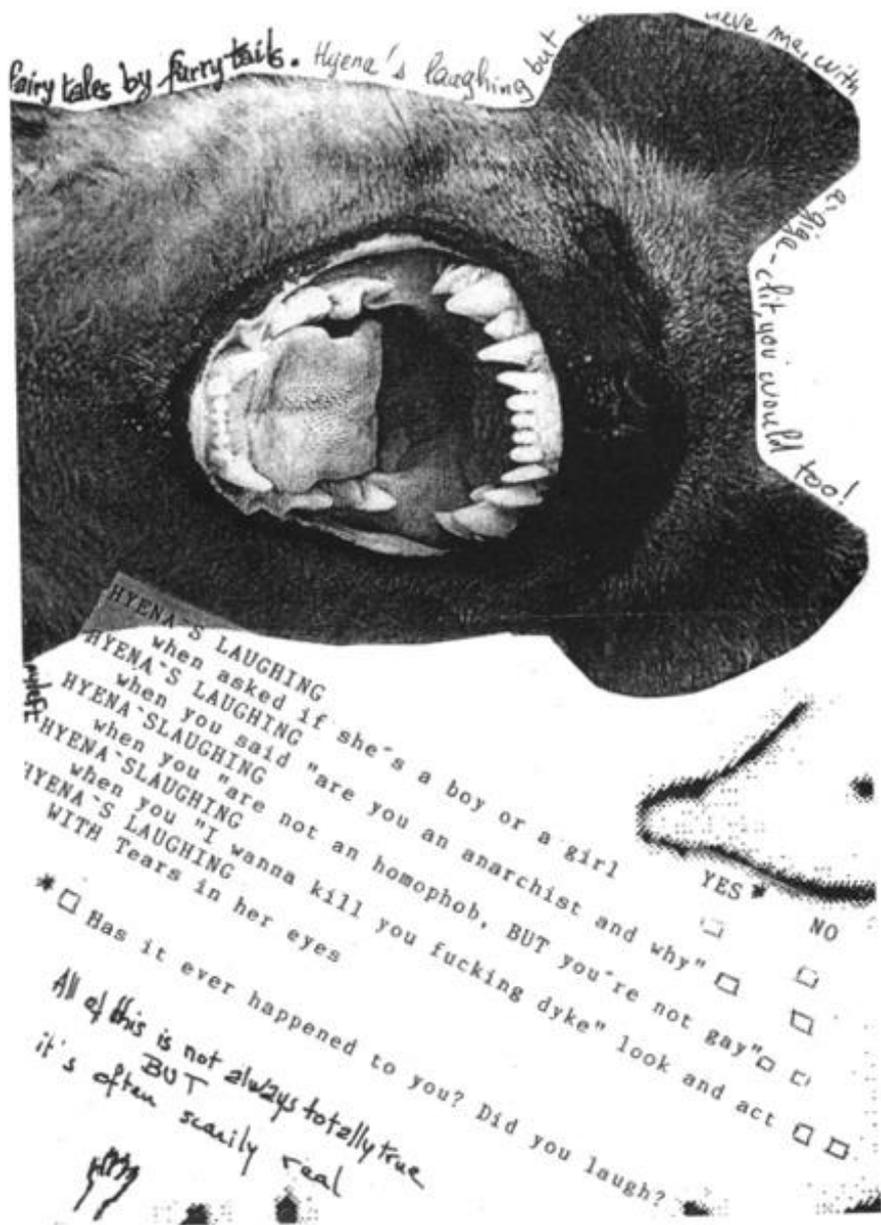


Figure 5. Val Rauzier and Adi Đukić “Hyena’s Laughing,” *Laugh of the Stri(p)ped Hyena* (2008) (Reproduced with a permission from the authors).

to say whether she/he/they ever experienced one of the listed dangerous situations that are related to the issues of transphobia, homophobia, and other types of violence. Just like in the song analyzed by Hayward with its starfish-human somatic union, the zine becomes an intimate space, where hyenas and humans share queer kinship and transgressive tendencies in breaking boundaries, resisting classifications, and challenging taxonomies. Rauzier writes: "... a zine is where I create my own freedom, where I stretch my limits, my space, where I explore self-expression, where I try to go beyond suffocating categories and ranks; it is where I really and truly attempt to make sense in the raging sea of all the possibilities."⁶⁰⁶

The idea of creating shared spaces which open up possibilities of an alternative "traffic in HumAnimals" is a powerful movement towards transpeciation, carrying affects and pieces of information about sex and gender into a whole of interspecies ontology, of becoming a political collective body. There is something utopian in this political project. Gayle Rubin, who inspired my idea of traffic in HumAnimals, allows herself to dream of a feminist utopia. "The dream I find most compelling" – she writes – "is one of an androgynous and genderless (though not sexless) society, in which one's sexual anatomy is irrelevant to who one is, what one does, and with whom one makes love."⁶⁰⁷ Imagining utopias allows for redefining intimacies.

"Transpecies intimacy" in itself is not an innocent concept, but among many trajectories it might take, this form of intimacy can function as another shared space, where along the somatechnics of humanimal interrelations the category of the species gains new meanings built upon scientific interest in normalizing bodies to make them viable and fit the larger body politics. For certain queer persons, the alienating experience of belonging to "other species" might become a starting point for unthinking the rigid boundaries of the species, gender, or sexuality as strictly classificatory categories. For example, with his research on transsexuality and monstrosity, Anthony Clair Wagner wishes for "... a world in which the category of the human will be opened up and immeasurably enlarged, and in which fear and boundaries will become obsolete."⁶⁰⁸ Whether one decides to embrace the cyborg, the

⁶⁰⁶ Ibid., 20.

⁶⁰⁷ Rubin, *The Traffic in Women*, 1975, 204.

⁶⁰⁸ Wagner, "MONSTERS'S'US: The Emergence of a Workshop," 343.

monster, or the nonhuman in a queer desire to transgress the boundaries of species category, it is important to bear in mind both the privileges of the position from which one is able to imagine such transgression, and possible consequences of such actions. Given that hyena's route in the traffic in HumAnimals runs through colonial and racialized imaginaries of Africa and its wildlife produced by the Western savior-science discourses, identification or affinity with this particularly racialized animal is already a site of privilege easily occupied by white bodies. In this sense, Haraway's notion of the "partial perspective" grounds my analysis in its attention to the economy of parts and partiality in knowledge production.⁶⁰⁹

The focus on the visible sexual body parts and scientific process of making visible the bodily internal secretions as sites for sexual difference requires an operation of fragmenting the body to extract those parts that become epistemologically meaningful and economically viable for human understandings of sex and gender. In her discussion of transnormativity in relation to discourses on disability, Jasbir Puar writes about "piecing"⁶¹⁰ as a basic capacity of the neoliberal biomedical regime. Opposed to "passing" as normative, the process of "piecing" territorializes bodies as a terrain for medical market and integrates them into the body politics, where fluidity and flexibility become highly valued assets.⁶¹¹ She writes: "Passing and piecing would be destabilized from their discrete sexual and racial referents and understood, rather, as produced through interfacing assemblages of de- and reterritorialization, of proliferating not only genders but also races and, indeed, species."⁶¹² Drawing on Puar's perspective, I argue that the symbolic and actual partitioning of the hyena's body is crucial for the fluidity and mobility that these sexual markers gain within the traffic of HumAnimals. It allows not only for focusing the scientific vision on the "odd and bizarre" traits that distinguish this species ("nonstandard" genitals, or "unusual" hormone levels), but more precisely facilitate the folding of the experimental animal body into capitalist economies of profit.

Moreover, the dismemberment of the body along with the biomedical circulation of parts between species is predicated on a racial ontology. As Hortense Spillers poignantly shows in her essay on the gendered dimensions of the slave trade, the distinction between "body" and "flesh" is central for the dehumanizing, torturous,

⁶⁰⁹ Haraway, "Situated Knowledges," 1991.

⁶¹⁰ Puar, "Bodies with New Organs," 54.

⁶¹¹ *Ibid.*, 57.

⁶¹² *Ibid.*, 66.

and profit-based aspects of the colonial traffic in captive black bodies that also involved medical science as its benefiter.⁶¹³ While the “body” drifts toward wholeness, the “flesh” offers itself for fragmentation, piecing, compartmentalization. This key feature exposes the traffic in HumAnimals as an always already racialized movement functioning alongside the colonial trade and haunted by the “hieroglyphics of flesh,”⁶¹⁴ however the specific trajectory of this movement varies depending on who is trafficked: in the case of hyenas their enfleshment and piecing pushes them closer towards the category of “the diseased human” within the biomedical registers.

Paul Preciado in his autobiographical book on transmaculinity shows that the commercial and scientific traffic in animals along with the archeology of sex hormones allowed for the gendered modern capitalist world as we know it – where femininity is produced through the hormonal control of reproduction, and masculinity and its hormones are associated with vigor, strength, sexual desire, and dominance. He links the discovery of hormones with industrial capitalist “practices of telecommunication, travel, traffic, and exchange”⁶¹⁵ to later argue that early endocrinology established new trafficking networks of biological substances across laboratories, prisons, slaughterhouses and clinics: “Sex hormones are the result of such traffic. They *are* this traffic.”⁶¹⁶ With my focus on certain nonhuman animals that cross boundaries of the “sex/gender system”⁶¹⁷ and function within the complex network of transpecies kinship structures, I show how the very categories of gender and sexuality are shaped within a dynamic choreography of institutional, biopolitical, scientific, and capitalist settings. Increased attention to “insubordinate” nonhuman animals that complicate human understandings of gender and sexuality is something to be critically examined both in biological sciences, and in queer and posthumanist scholarship. In my analysis the desire to transgress the boundaries of taxonomic divisions, medical classifications and find a shared space in a queer ecology re-creating those understandings of gender and sexuality supplies alternative pathways for gender transition as a movement towards, not away from the unclassifiable, odd, or even repulsive. Bodies are not static entities, but are rather dynamically shaped and re-shaped in and by various movements – actively engaged in fleshy growing,

⁶¹³ Spillers, “Mama’s Baby, Papa’s Maybe,” 68.

⁶¹⁴ *Ibid.*, 67.

⁶¹⁵ Preciado, *Testo Junkie*, 158.

⁶¹⁶ *Ibid.*, 163.

⁶¹⁷ Rubin, “The Traffic in Women,” 1975, 159.

pulsing, digesting, morphing, breathing, adapting, stretching, and shrinking in multiple directions.

As a mode of de-ontologizing sexual difference the hyena-human “transpecies intimacy” needs to become accountable for dispatching ambivalent traces of scientific appropriation of human and nonhuman bodies. With a colonial overshadowing of this potentially emancipatory tool, this form of intimacy is still inscribed into the hazardous traffic in HumAnimals. In this sense, “transpecies intimacy,” as the analytical tool I propose, relies on partitioning of any interspecies encounter – a partitioning that enhances the mobility of the pieces in a given story, but also circumscribes the perimeters of such encounters. The glass case in the natural history museum, scientific research reports, the cut-up aesthetics of the zine, or any other cultural representations all give only a peephole view of the hyena. It is important to bear in mind that this liminal living creature is not composed from all these partial connections to the human. Hyenas and their hormones assemble sustainable queer ecologies vitally re-working human understandings of gender and sexuality.

Chapter 6. Pandas and the Reproduction of Race and Heterosexuality in the Zoo

*“I don't see why the spies should
impersonate a bear.
To get into the zoo and spy?
But anyone can go to the zoo.”*
— Eve Kosofsky Sedgwick “Pandas in Trees”

“Brace yourself for a little Canadian Panda-monium,” states the 2012 *Toronto Sun* news report from Beijing, officially announcing the long awaited agreement between China and Canada to lend a breeding pair of giant pandas (*Ailuropoda melanoleuca*, 大熊貓) to the Toronto and Calgary zoos.⁶¹⁸ The “panda pact” was the highlight of Canadian Prime Minister, Stephen Harper’s visit to China in February 2012, which resulted in trade deals worth 3 billion dollars, securing Canada’s access to the Chinese market, energy cooperation, and sealed eighteen years of negotiations on a declaration of intent on a foreign investment protection agreement (FIPA).⁶¹⁹ A photo of Stephen Harper and his wife Laureen holding a panda cub during their visit to the Chongqing Zoo in Western China, where the official Giant Panda Cooperation Agreement had been signed, was probably one of the most publicized images of this primarily economic visit (Fig. 6). Following this business visit, in 2013 two carefully selected adult panda bears, named Er Shun and Da Mao, arrived at the Toronto Zoo with a mission to reproduce for their species survival. As part of an international agreement the breeding pair will reside in Canada for a total of ten years. In March 2016 a photograph of Harper’s successor, Justin Trudeau, holding a pair of panda cubs in the Toronto Zoo, outshined the previous “panda publicity” (Fig. 7). The new Canadian Prime Minister was photographed with the first giant pandas born in Canada – a huge success of the zoo’s elaborate breeding program.

What makes pandas such powerful symbolic players in international politics? Why are these animals so enthusiastically welcomed in the West? What do pandas come to symbolize in the Western context beyond the framework of China’s

⁶¹⁸ Akin and Chief, “Harper Brings Home Pandas from China.”

⁶¹⁹ “Harper’s China Visit Ends with Panda Pact.”

diplomatic toolkit? In this chapter I focus on the giant panda exhibition in the Toronto Zoo. I analyze the ways in which this animal display not only evokes reproductive hopes, with breeding being the focal point of the pandas' residency in Toronto Zoo, and naturalizes heterosexuality as national, public, and precarious, but also racializes the nonhuman animals as powerful symbols of Canadian-Chinese friendship. Drawing on Mel Y. Chen's *Animacies*, I show how the public display of institutionalized panda intimacy in the zoo is deeply entangled with the symbolic economies race, class and gender, as well as international diplomacy, global capitalism, and neoliberal politics.⁶²⁰ With the framework of what I call the "traffic in HumAnimals" I trace the trajectories of the multidirectional flows of human and nonhuman animals, capital, economic values, natural resources, and cultural meanings attached to the Giant Panda Experience Exhibition in Toronto Zoo, which I visited in September 2014 and December 2016.



Figure 6. Stephen and Laureen Harper with a panda cub (2012).



Figure 7. Justin Trudeau holding panda twins (2016).

I follow Er Shun and Da Mao's journey to Canada and situate it within the historical context of human migration from China to Canada, and the trade agreements between the two countries, in order to interrogate the parallel processes of construction of race and sexuality that represent the pandas as powerful naturalizing symbols. Biotechnology plays a crucial role in the state-funded attempts to breed giant pandas in zoos, where kinship structures get reformulated along with the idea of an extended interspecies family.

⁶²⁰ Chen, *Animacies*, 2012.

While most analyses of the so called “panda diplomacy” focus on China’s soft-power strategy realized via the international panda loan system, I shift attention towards the mechanisms at play on the Western end of this commercial and political agreement. There is a vanishing point between Chinese political gains and Canadian commercial use of pandas that becomes more apparent when one investigates the emphasis on the structurally bound reproductive aspect of the giant panda conservation plan. I argue that within the context of the zoo exhibitions in the West, pandas function not only as political ambassadors of their country of origin, but also as symbolic refugees of a racial fantasy that is critically tied to issues of gender and sexuality. While Lisa Uddin in her analysis of the Smithsonian National Zoo’s panda exhibition argues that within the historical context of the U.S. it served as the epitome of a naturalized American heterosexuality – one curiously devoid of any reference to whiteness, – my interpretation relocates this sexual transposition onto a racial identity attached to the nonhuman animals themselves, rather than to their audience in the place of display.⁶²¹ In other words, what is at display is a re-imagined Asian-American sexuality – one no longer threatening with overpopulation, unlawful perversions, and economic drain, but rather strictly controlled with modern reproductive technologies. In this sense the sexualized aspect of the panda breeding plan becomes constitutive of the symbolics of race implied by the nonhuman animals being the symbolic and material property of China, and at the same time produced by the intense power relations reaching far beyond the walls of the zoo. As Zakiyyah Iman Jackson suggests, race is thus constructed as “a structural position, as an ontology rather than an identity or sociological experience.”⁶²² I argue that as such race is a highly structured power category that can function across the species boundaries and be exercised on nonhuman bodies.

While Randy Malamud, a literary scholar, argues for “the zoo as a venue for symbolically playing out issues of human sexuality – straightforwardly or ironically,”⁶²³ I would suggest switching the attention for a moment from humans to the control of the nonhuman animals’ sexuality and sex lives and its impact on human visitors. Studies privileging visual analysis of animal collections fail to show more nuanced mechanisms of how these public establishments mutually produce gender,

⁶²¹ Uddin, “Panda Gardens and Public Sex at the National Zoological Park.”

⁶²² Jackson, “Waking Nightmares—on David Marriott,” 358.

⁶²³ Malamud, “Zoo Spectatorship,” 226–27.

sexuality, and race through the construction of the idea of Nature. I think that studies which take into account the broader context of the exhibition better capture the invisible elements constituting the spectacle from “the outside,” and reveal the politics of control imbedded in exhibition practices. Contemporary zoos no longer serves as simple collections, a menagerie of species frozen in their taxonomic moments, but rather become a spaces of intense chronopolitics materialized in Species Survival Plans (SSPs) or the Frozen Zoo™ designed to alleviate the trauma of extinction, and with the tools of modern technoscience secure “a better future.” More importantly in the case of the Toronto Zoo pandas, public interest in breeding them is also pre-structured by the assumption that these animal “migrants” will not cause problems with overpopulating the zoo. To the contrary, the reproductive imperative of the pandas’ visit to Canada is part of the zoo’s regulatory regime and incites curiosity about the animals’ sex lives – particularity via sensationalist news about their sexual behavior and failure to mate. In this sense human reproductive hopes construct the panda as an ideal “immigrant,” who is not even much interested in reproduction, and thus the Artificial Reproductive Technologies (ARTs) not only mediate this process, but also ensure its (illusionary) controllability.

Panda Pact

The practice of using giant pandas as tools for diplomacy has a long history in China dating back to the seventh century, when the Empress Wu Zetian sent a pair of these rare animals to the Japanese emperor. This so-called “panda diplomacy” serves as a way to foster relationships with other countries as an integral part of China’s soft power.⁶²⁴ Most studies claim that panda diplomacy has at least three crucial stages. The term was coined during the Cold War, when the People’s Republic of China started offering pandas as diplomatic gifts to strategically selected countries as part of their foreign policy plan. When earlier in the 1930s animal dealers brought these rare and exotic animals to Western zoos, the Chinese government promptly recognized the great public interest and enthusiasm the bears caused there, and made legally all giant pandas the property of the state.⁶²⁵ It wasn’t until 1957 that Mao Zedong decided to give away the precious bears⁶²⁶ to his country’s strategic allies, the Soviet Union and

⁶²⁴ Wen-Cheng, “China’s Panda Diplomacy.”

⁶²⁵ Cushing and Markwell, “Platypus Diplomacy,” 256.

⁶²⁶ Taxonomically the giant panda belongs to the bear family, *Ursidae*.

the Democratic People’s Republic of Korea. Pandas played an important role in the Cold War political game. In 1972 for the first time pandas were offered as a diplomatic gift to a Western political power, when following Richard Nixon’s visit to China a pair of pandas (Hsing-Hsing and Ling-Ling I describe later in this chapter) was sent to the U.S. It was a clear sign of warming of the Sino-U.S. relations. Between 1957 and 1983 China gifted twenty-four pandas to nine nations to strengthen its geopolitical power and build relations with political allies.⁶²⁷

The second stage of panda diplomacy commenced in 1984 when two pandas were loaned to Los Angeles Zoo for the Olympic Games.⁶²⁸ Since then, China was undergoing structural economic reforms introducing market principals to the socialist state and had stopped giving away pandas as “free” diplomatic gifts, an instead embarked on what in the West was a ironically called the “rent-a-panda” program. Following a capitalist lease model, the precious animals were now being leased for a fee of US\$50,000 per month to zoos in countries seen as important allies for Chinese economy that was now opening up to foreign investments.⁶²⁹ Panda loans for zoos around the world were since recognized as a lucrative business – China collected a percentage of souvenirs sales, and still managed to maintain its role in international relations within the free market economy. Most importantly, this shift in panda diplomacy coincided with the official classification of the giant panda as an endangered species by the U.S. Fish & Wildlife Service in 1984, and subsequently putting them on the Red List of Threatened Species by the International Union for Conservation of Nature in 1986.⁶³⁰ Zoos always cherished pandas for their extremely rare status and the mystery around their habits, but their official classification as an endangered species significantly increased their value within the zoo industry, now critically re-focusing on the spectacle of nature conservation.

The “rent-a-panda” program has received severe criticism from environmental organizations. With the implementation of the ban on import and export of endangered species for commercial purposes under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1996, China

⁶²⁷ Schaller, *The Last Panda*.

⁶²⁸ In this phase of panda diplomacy the loans oftentimes coincided with the Olympic Games. In 1988, a pair of pandas was sent to the Calgary Zoo (Alberta, Canada), when the city was hosting the Winter Olympics. Possibly it was seen as a good opportunity to warm Chinese-Western relationships at the occasion of a spectacular international sport event.

⁶²⁹ Schaller, *The Last Panda*.

⁶³⁰ Imbriaco, *The Giant Panda*.

entered the third stage of panda diplomacy, where pandas are being loaned in the name of scientific research. In consultation with the government of China, CITES issued a special notification on the giant panda loans, where any export of the animal is only allowed if it generates positive conservation benefits to the species. Moreover, the document states that the “authorization to export animals able to breed should be given only in exceptional circumstances, where there is a high probability of breeding taking place and if the recipient institution co-operates with others in a breeding programme for the species.”⁶³¹ Breeding programs are presented as the key aspect of giant panda’s conservation and stand for a major justification for their global travels until today. However, it is worth noticing that this reproductive incentive was also present at the previous stages of panda diplomacy with the practice of sending *breeding pairs* of giant pandas rather than individual animals to zoos around the world. Of course, this practice was structured by a more general routine of collecting and exhibiting zoological specimens as representatives of a given species with gender dimorphism or its lack being an important species characteristic to account for in the taxonomic method. In case of the third phase of panda diplomacy being structured around the endangered status of the species, sending panda pairs as reproductive units is more legally bound.

While the giant pandas are supposed to be protected against commercial exploitation by international laws like CITES, it is clear that the Toronto Zoo hopes for a major increase in visitors and merchandise income. Chinese friendship expressed by an agreement to host the precious panda ambassadors is quite costly – Er Shun and Da Mao are loaned to Canada for a fee of US\$1 million per year. This money is supposed to be later devoted to conservation projects in China. Additionally, the keeping costs include building new panda facilities worth US\$14,5 million in Toronto Zoo, approximately US\$ 200,000 a year to supply them with fresh bamboo, and twelve years of intense logistic preparation work by the zoo’s special Giant Panda Task Force.⁶³² According to the loan contract between Canadian zoos and the Chinese Association of Zoological Gardens, the zoo must pay another US\$ 100,000 for each cub born in captivity, while China might still claims property rights over the offspring

⁶³¹ “Notification to the Parties No. 932 CONCERNING: Loans of Giant Pandas.”

⁶³² Hartig, “Panda Diplomacy.”

of any loaned pandas.⁶³³ The commercial character of pandas' visit is quite obvious from the above cost calculation.

Several authors point out that the Canadian "panda pact" is all about economic gains on both sides of the agreement, reaching far beyond the moral and biological values in wildlife conservation. On the one hand, Kathleen Carmel Buckingham (*et al.*) argue that the third phase of panda diplomacy, when *gifts* become *loans*, can be understood as an expression of building what is known in Chinese business relations as *guanxi* – "personalized networks of influence and a depth of relationship where members move into an inner circle characterized by trust, reciprocity, loyalty, and longevity."⁶³⁴ On the other hand, Rosemary-Claire Collard links the panda loan directly to Chinese access to Canadian tar sands oils, which extraction entails severe environmental costs. She writes: "the material production and flow of oil from Alberta, across British Columbia, and the Pacific, would occur at the expense of life and quality of life for millions of animals, from whales to caribou to salmon, bears, eagles, and many more."⁶³⁵ The proposed pipeline stretching across British Columbia is endangering not only nonhuman lives – the Northern Gateway's Line 9 runs through some of the most densely populated parts of Canada in Ontario and Quebec.⁶³⁶ Similarly to Collard's claims, Falk Hartig also positions the panda loan as a diplomatic-commercial gesture within the framework of Canadian energetic security seeking independence from the U.S. market, and further recognizes the 2013 panda loan agreement as a mark of a significant shift in Canadian-Chinese political relations after a period of Ottawa's ensuing critiques of Beijing's politics.⁶³⁷

There is no doubt that the return of the giant pandas to the Toronto Zoo after twenty-eight years of absence was a high rank event. The last time giant pandas were present in Toronto Zoo was in 1985, when Qing Qinq and Quan Quan arrived from

⁶³³ Raj, "What If Something Happened To These National Treasures?"

⁶³⁴ Buckingham, David, and Jepson, "Diplomats and Refugees," 265.

⁶³⁵ Collard, "Panda Politics," 230.

⁶³⁶ The construction of pipeline by energy delivery mammoth Enbridge Inc. not only violates aboriginal land rights in their respective territories, but also puts the First Nations communities at risk of toxic spillage that threatens water supplies. This is yet another example of colonial violence against indigenous populations for the sake of commerce. The pipeline proposal is under attack from the First Nations leaders and the *Idle No More* movement – a women-led grassroots movement for indigenous sovereignty that puts environmental protection at the heart of the Indigenous Ways of Knowing. See, Gray and Thomas-Muller, "Grassroots Anti-Pipeline Groups and Idle No More Say, 'Enbridge No More! Shut Down the Tar Sands!'"

⁶³⁷ Hartig, "Panda Diplomacy," 70–71.

China for a brief, 100-day-long long visit. Ron Barbro, the zoo's chairman at the time, interviewed by the CBC's *The Journal* just hours after the pandas arrived said: "To have the rarest, most loved animal in the world on exhibit in your place for a while, it's like the art gallery having the Mona Lisa, it's a marvelous feeling."⁶³⁸ Hosting Er Shun and Da Mao for ten years suggests major diplomatic and political significance of this new agreement, and supports Collard's and Hartig's thesis on the structural dependency between the highly publicized "panda gift" and Chinese access to Canadian natural resources, or rather Canada marketing its natural resources for China. When Er Shun and Da Mao arrived in Canada on March 25th 2013, they were welcomed at the Pearson International Airport by Stephen Harper and Hu Jintao, President of People's Republic of China. According to the official Toronto Zoo press release, the pandas' arrival drew more media attention than the visit of the Queen.⁶³⁹ Ontario's Minister of Tourism, Culture and Sport, Michael Chan commented: "People from the West are gifted a treasure from the East, creating a lasting legacy."⁶⁴⁰ Panda diplomacy inscribes well into the classic gift-exchange economy model described by ethnographer Marcel Mauss: "exchanges and contracts take place in the form of presents; in theory these are voluntary, in reality they are given and reciprocated obligatorily."⁶⁴¹ While Er Shun and Da Mao were shipped across the Pacific Ocean with a special mission to breed for their species' survival and at the same time tighten the Sino-Canadian economic and political relations, tar sands oils were supposed to flow via the proposed Northern Gateway pipeline, or from Alberta to Kitimat (British Columbia) and from there be shipped via tankers across the Pacific to China. This traffic in animal bodies and natural resources is not only functionally linked, but also economically dependent.

Cuteness Combat

In this section I emphasize that while the commercial and economic significance of the panda loan system in late capitalism is crucial in what makes this species part of the "animal capital," to use Nicole Shukin's term that I develop later in this chapter,⁶⁴² there is another layer of meaning that is a direct consequence of the

⁶³⁸ Nixon, "Do You Remember the Pandas?"

⁶³⁹ "Toronto Zoo Giant Panda Retrospective 2013-2014."

⁶⁴⁰ Wolstat, "Giant Pandas Settling in at Toronto Zoo."

⁶⁴¹ Mauss, *The Gift*, 1989, 3.

⁶⁴² Shukin, *Animal Capital*.

meticulous work in making the giant panda a cultural and political trademark of China – namely, the more or less subtle reference to racial citizenship.

Consider for example, the illustration from 1972 depicting Smokey the Bear and his family welcoming the panda bears Hsing-Hsing and Ling-Ling to the National Zoo in Washington D.C. (Fig. 8).⁶⁴³ Smokey is the official mascot of the public campaign on the forest-fire prevention in the U.S., and was extremely popular between the 1950s and 1970s. Wearing his iconic campaign hat of the U.S. National Park Service, Smokey and his anthropomorphized family represent the American public welcoming the two Asian bears. In the illustration Smokey’s “wife” is holding a bamboo cake with the frosting reading “Welcome neighbor.” Both her attire – an apron and a scarf patterned with the slogan “prevent forest fires” – and a recipe for the bamboo delicacy tucked under her arm, suggests that like her “husband” she is also an icon – that of female domesticity of the postwar era. In contrast to this American nuclear bear family, the two almost identical pandas approaching with their suitcases covered with air travel stamps show little gender-specific characteristics (unlike Smokey’s family they have no clothing).

The depiction of this fictional meeting of two “bear cultures” at the zoo, bears some significant material traits. On the one hand, the characters represented in this cartoon each have their own actual living equivalents. The “original” Smokey was an American black bear (a species native to North America), rescued from a wildfire in Lincoln National Park as a cub, and later resided in the National Zoo between 1950 and 1976. In 1962 another orphaned bear joined him – a female named Goldie. The two never mated, but they had an “adopted” son.⁶⁴⁴ The real Hsing-Hsing and Ling-Ling have been officially presented to Smithsonian’s National Zoological Park on April 20th 1972.⁶⁴⁵ On the other hand, this comical and seemingly innocent anthropomorphization of the two iconic species of the same family (*Ursidae*) is a clear reference to racial citizenship. While Smokey and his family are almost stereotypically American, Hsing-Hsing and Ling-Ling are supposed to represent their Chinese neighbors.

⁶⁴³ The same watercolor painting is briefly described by Lisa Uddin in her latest book analyzing the modern American zoos in the context of 1960s and 1970s urban renewal as testing grounds for homegrown white fears about the city. See, Uddin, *Zoo Renewal*, 156.

⁶⁴⁴ Hawes, “Smokey Comes to Washington.”

⁶⁴⁵ Wright, “Panda-monium!”



Figure 8. Illustration of Smokey Bear and family welcoming the pandas to National Zoo, 1972, painted by Rudolph Wendelin, official artist of Smokey Bear, Smithsonian Institution Archives, Record Unit 365, SIA2012-6127.

The reference to racialized citizenship of the pandas as identified with Chinese persons might be hidden behind their apparent uniformity, but it is made even more observable in a recent depiction of Hsing-Hsing and Ling-Ling in an animated commercial spot aired during the Super Bowl in 2008 in the U.S.⁶⁴⁶ The advertisement of an online service providing sales leads features Ling Ling, his wife Ching Ching, and their small business “Ling Ling’s Bamboo Furniture Shack”

⁶⁴⁶ Milo, *SalesGenie.com*.

experiencing trouble with attracting customers. Ching Ching declares she is not going back to the zoo, and she calls a Panda Psychic for advice. A Buddha-like spiritual guide suggests subscribing to the advertised service. Six months later the couple parks their bamboo car in front of their previous bamboo furniture “shack” turned “emporium.” With two baby cubs on the backseat, the panda family decides to see the grizzly bears in the zoo. This short animated video shot in a vintage style of the early Hanna-Barbera animations is seething with overt racial/racist references to the famous zoo dwellers: the background music seems “oriental,” both pandas speak with an accent, and the lettering intentionally resembles Chinese calligraphy with the overtly used “Chinatown” font. In this sense, the bamboo-chewing bears rather than representing Chinese citizens are depicted as stereotypical Asian-Americans striving to make a good business. With their superior entrepreneurial skills owed to the advertised service, pandas outsmart the native grizzly bears stuck at the zoo (suggestive of a ghetto). From the vintage style of the animation referring back to 1970s and the names of the main characters it can be deduced that the pandas are supposed to be direct references to Ling-Ling and Hsing-Hsing from the National Zoo. However, the commercial reverses their genders, depicting Ling Ling as a male, and Ching Ching (probably meant to be Hsing-Hsing, but misspelled) as a female. In this way, the trope of transposability between genders and individual pandas rehearses the racist perception of Chinese people as uniform and interchangeable.

Both of these examples of how representations of pandas get saturated with references to racial citizenship dwell on long tradition of making pandas synonymous with their country of origin. The complex blend of pandas’ role in the global politics of nature conservation, the huge focus on their reproduction (partially induced by the international animal trade laws designed to restrict their commercial use), and their unique status as one of China’s key cultural icon, make these nonhumans into rich material-semiotic (and context-specific) referents to national belonging, and specifically to the category of race. In this sense I am not only interested in tracing the ways in which some humans have been and are animalized, but also in the parallel flow in meanings that makes nonhuman animals stand for racialized symbols of humanity. In other words, through my research material I show how the human idea of race can be articulated through nonhuman animality. In *Primate Visions* Haraway describes this complex operation. She focuses on apes in what she calls “simian

orientalism” indicative of the early modern and modern primatology.⁶⁴⁷ Haraway reveals parallel processes of constructing the great apes as almost-human, kin, surrogate children, pets, research subjects, wild animals, and an endangered species, while envisioning the black “natives” as not-yet-human, “savage” kin, perpetual children, servants, research subjects, and part of the wildlife that might as well become endangered.⁶⁴⁸ “The animals are,” Haraway asserts, “(colored) surrogates for all who have been colonized in the name of nature and whose judgment can no longer be repressed.”⁶⁴⁹ Can this racialization be as easily applied to nonhuman animals from outside of the simian family? I think that particularly those traits that make the giant pandas anthropomorphizable make those nonhumans susceptible to occupying a raced position in human imaginary and form a kind of “panda orientalism.” Cynthia Chris in her analysis of wildlife documentaries about pandas, notes:

[T]hese representations mark the animal’s physiological and behavioral attributes and its habitat as inscrutably unique; its diplomatic currency as invaluable; and its need for heroic interventions by (mostly) American scientists and conservationists (and their West-influenced Chinese counterparts) to save this rare species, acute. Consequently, they are infused with a kind of textbook Orientalism, always mediated through exoticizing and controlling gazes.⁶⁵⁰

Stemming from that I ask, what exactly is the relationship between zoo exhibition, colonialism, and the production of race?

Historically zoos are key sites for the colonial traffic in animals. Explorers brought animals as trophies, curiosities from foreign lands, and exotic gifts from newly acquired colonies. Nancy Cushing and Kevin Markwell writing about animal diplomacy note that some animals gained special cultural status, because they “were generally highly prized in their homeland for their physical appearance, fierceness or rarity and were often procured as ceremonial gifts, tributes signaling submission or alliance, bribes or reparations from local rulers.”⁶⁵¹ They point out that the crucial element of animal diplomacy is the direct and exclusive association with the animal’s country of origin. In this sense, pandas are perfect examples of a distinctive charismatic megafauna that naturally occurs only in portions of six isolated mountain ranges in central China, specifically in the provinces of Sichuan, Gansu and Shanxi.

⁶⁴⁷ Haraway, *Primate Visions*, 11.

⁶⁴⁸ *Ibid.*, 23.

⁶⁴⁹ *Ibid.*, 152.

⁶⁵⁰ Chris, *Watching Wildlife*, 169–70.

⁶⁵¹ Cushing and Markwell, “Platypus Diplomacy,” 256.

In other words, pandas can become exclusively synonymous with China. Among other national animals, such as the mythological Chinese dragon, the red-crowned crane, or the Imperial guardian lions, pandas hold a special place thanks to their unique diplomatic value. As a cultural icon these cuddly, clumsy bears are primed to serve as perfect goodwill ambassadors of friendship and peace – their cute appearance evokes empathy, they are given “friendly names” (for example Er Shun translates into “double smoothness”),⁶⁵² they are “vegetarians” and their diet consisting in 99% of bamboo that their carnivorous digestive system needs to slowly process makes them quite lethargic and thus appearing peaceful. Moreover, with their upright posture and the “panda thumb” – an elongation of the wrist bone that enables them to grasp bamboo – they are easily anthropomorphizable. In their book *Men and Pandas* Ramona and Desmond Morris, popular writers in human sociobiology (the latter discussed earlier in chapter 2), point to other similarities between the bears and humans, like a flat face, small tail, and even lack of visible sexual organs as characteristics making them primed for being innocent cuteness ambassadors.⁶⁵³ Those characteristics of pandas can be also described as neotenus due to their juvenile-like appearance.

The Toronto Zoo capitalizes on these unique traits of the giant pandas to boost public attention for their new profitable exhibition. With highly visible media events such as the Inaugural Black and White Gala Fundraiser, VIP opening of the panda exhibition with special guests (including presidents, ambassadors, ministers and sponsors), political gestures like ceremonial planting of a maple and a bamboo tree in the zoo as botanical symbols of friendship between the two nations, and other strategies to increase publicity like celebrating Er Shun’s and Da Mao’s birthdays, launching the Giant Panda Awards, and distributing videos from panda cams, Er Shun and Da Mao are fetishized as living mascots of the Chinese-Canadian friendship. At the announcement of The Moon Festival Gala, held as part of the celebration of the Toronto Zoo’s 40th anniversary, Mr. Fang Li, Consul General of the People’s Republic of China in Toronto, said: “The pandas have brought the people of China and the people of Canada together again. We continue the celebration of close cultural

⁶⁵² In 1999, the San Diego Zoo celebrated the birth of the first panda born in the U.S. to survive to adulthood. The cub was named Hua Mei, which means „China-USA” and symbolizes friendship between the two nations whose political relations had been tense back then.

⁶⁵³ Morris and Morris, *Men and Pandas*, 197–202.

ties between the two countries symbolized in the pandas.”⁶⁵⁴ “Cuteness combat” (as one of the news on the Zoo’s webpage framed the marketing-generated competition between viewing rates of Er Shun’s and Da Mao’s webcam feeds) ensues in the name of international friendship based on economic revenues and wildlife conservation efforts to save a species so lethargic in reproducing itself, with or without human intervention.

Untangling Reproductive Desires

From the abundance of panda-themed imagery that visitors encounter on their way to the Toronto Zoo, one could conclude that this species reproduces quite well – at least at the level of mass merchandise representations. Panda faces peak out from metro ads and street signs leading to the zoo. From the entrance it is obvious that the Giant Panda Experience exhibit is currently the main attraction of the zoo. However, the thrilling moment of meeting those two furry celebrities is suspended until the zoo-goers travel through the Panda Gate leading to the interactive Panda Interpretative Centre. Geared with the latest multimedia technology this labyrinth of panda-related facts builds up the well-known narrative of bizarre gentle creatures under the threat of extinction. This educational facility is what Rothfels describes as an immersion exhibit: “a place where both the animal, and increasingly, its human observer appear to be ‘immersed’ in a natural environment.”⁶⁵⁵ According to Carolyn Smiths, the senior designer of the exhibit: “Within the Centre, visitors will be *immersed* in everything they need to know about this iconic, fascinating and endangered animal. Our combined aspiration is that the experience will inspire visitors to join in the conservation and efforts currently underway to help protect this and other endangered species (emphasis mine).”⁶⁵⁶ Of course the “naturalness” of this display is a convention, and the bamboo forest in which the viewer is supposed to be immersed is a flat wallpaper print.

Just after leaving the two-dimensional forest and learning about the importance of protecting bamboo habitats for giant pandas’ survival, visitors are invited to join the panda “mating game” (Fig. 9). This part of the exhibit builds on another unique trait of the giant pandas – their extremely low fecundity. The

⁶⁵⁴ “Moon Festival Gala in Support of Giant Panda Conservation Fund.”

⁶⁵⁵ Rothfels, “Immersed with Animals,” 199.

⁶⁵⁶ “Reich+Petch Designs Highly Anticipated Panda Interpretive Centre at the Toronto Zoo.”

information board of the game explains that in the wild pandas are solitary animals, and in captivity it is the role of the scientists to match healthy, genetically suitable breeding partners. In this interactive game visitors are asked to find the “right” match for a female panda by rotating a dice with four “candidates,” and choose one according to a list of desired qualities of the future mate, including factors such as sexual maturity and genetic relatedness. There is only one correct answer marked with a heart symbol appearing between the two “suitable” panda “lovers.” The mating game is supposed to educate the public about a process that actually occurs back in the Chinese panda breeding centers and zoos, where genetically suitable breeding pairs are pre-selected for each loan contract. That is also where the temporary zoo attractions and their eventual offspring will be sent back to after their contract is up. The Toronto Zoo website states that: “Er Shun and Da Mao were chosen to come to Canada because they are a good genetic match for breeding,”⁶⁵⁷ but as I will demonstrate later in this chapter, not everything went so smoothly with selecting the “right” breeding partners.



Figure 9. “The Mating Game” at the Giant Panda Experience Exhibition, Toronto Zoo, 2014. Photo by author.

The reason that these breeding puzzles allow the audience to choose between several males for only one female seems to be because female pandas are monoestrus, which means they have only one reproductive cycle per year. That is the only time the

⁶⁵⁷ “Toronto Zoo | Giant Pandas.”

female is receptive to the male, and it lasts for a period of 24 to 72 hours.⁶⁵⁸ Female “receptiveness” falls into the classic Darwinian and neo-Darwinian evolutionary model of sexual selection process that produces binary sexual difference in the natural world, and is widely adopted in the zoos’ breeding and exhibiting practices.⁶⁵⁹ In the case of pandas the reproductive “window” is well represented by the “Moon Gate” – a detail of zoo architecture described by Uddin in her analysis of Ling-Ling’s and Hsing-Hsing’s outdoor enclosure at the National Zoo. Moon Gate in a form of a walkway or a window is a typical element of the traditional Chinese garden architecture, usually employed by the rich upper class.⁶⁶⁰ In the zoological garden a simplistic ornamental window allowed for brief, intimate encounters between the otherwise separated male and female pandas, and inscribed the idea of narrow breeding opportunity and short reproductive cycle into the zoo landscape design. Uddin notes that “the moon gate was key prop for panda courtship, converting a delicate flavor of wildness into what exhibit architect Avery Faulkner called ‘Chinese flavor.’”⁶⁶¹

The entrance to the Giant Panda Experience in Toronto leads through a semi-circular gate that resembles a panda face, and also takes a shape of a typical entrance to a traditional Chinese garden. The Moon Gate installed in the panda enclosure of the National Zoo, apart from serving as a symbol heterosexual intimacy in a postcolonial guise as suggested by Uddin, represents a subtle interweaving of race and sexuality. The “Chinese flavor” inscribed in the exhibit element designed to induce romanticism into animal sex on display is not just a coincidental ornamental choice, but also a racializing tool. The structural interdependence and mutual construction of the categories of race and sexuality is well evidenced in Siobhan Somerville’s article “Scientific Racism and the Invention of the Homosexual Body,” where she asks: “is it merely a historical coincidence that the classification of bodies as either ‘homosexual’ or ‘heterosexual’ emerged at the same time that the U.S. was aggressively policing the imaginary boundary between ‘black’ and ‘white’ bodies?”⁶⁶² In the case of black-and-white nonhuman bodies on display it is not a coincidence that human reproductive

⁶⁵⁸ In the exhibition there is never any direct mention of male patterns of sexual arousal, what reinforces an idea of female coyness/choosiness and falsely suggests that males are sexually active all the time.

⁶⁵⁹ More on that in Parisi, “Event and Evolution.”

⁶⁶⁰ See, Henderson, *The Gardens of Suzhou*.

⁶⁶¹ Uddin, “Panda Gardens and Public Sex at the National Zoological Park,” 87.

⁶⁶² Somerville, “Scientific Racism and the Emergence of the Homosexual Body,” 245.

hopes are projected onto them together with the Orientalizing baggage of this postcolonial spectacle. What I highlight is not only the human desire to see pandas reproducing, but also its mediation via biotechnological tools, that makes this reproduction a highly controlled one. In the midst of the reproductive drama of the endangered bears, which won't just *do it* for its species survival, human scientists feel the need to step in to assure that the beloved creatures will be spared from extinction.

This aspect of human intervention has its place in the Toronto Zoo. The next part of the exhibit introduces people from “behind the scenes” that work with the pandas for their five-year residency in the zoo. Among experts who take care of Er Shun and Da Mao there is a reproductive physiologist whose role is to “help making a baby panda” – as one of the signs bluntly describes their function. The next big information board titled “High-tech Help for Pandas” features reproductive equipment used in the Toronto Zoo to realize this dream: a spectrometer to analyze hormone levels from female panda’s urine, a liquid nitrogen storage container for frozen sperm samples, an insemination catcher, a microscope, an incubator and an ultrasound machine. This modern reproductive technology is presented as a “magic bullet” that will help in realizing reproductive hopes, and at the same time interpellates the zoo as a procreative space.⁶⁶³ Noteworthy, many items from this reproductive equipment collection might seem particularly familiar to some of the zoo visitors, because they are exactly the same as the ones used in human assisted reproduction. An image of a newborn panda cub in an incubator, a machine that is equally capable of holding a human baby inside, contributes largely to the anthropomorphization of pandas discussed earlier in this chapter. The transgression between human and nonhuman reproduction is in this sense technologically mediated, and produces a shared space in the human/nonhuman kinship structures.

Er Shun’s hormone levels were being monitored every day from mid-March until the end of May to precisely establish when she enters the “magical” 48-72 hour-long window of estrus. Toronto Zoo’s chairman Joe Torzsok ensures: “The zoo will try its best to make that time romantic as we can in panda terms.”⁶⁶⁴ Props such as a spectrometer, an insemination catcher, an incubator, an ultrasound machine and other technologies of artificial insemination represent this “zoo romanticism.” However, not

⁶⁶³ For more information about contemporary bioscience and biotechnology used in species conservation, see Friese, *Cloning Wild Life*.

⁶⁶⁴ Yuen and Sun, “Panda Love Is in the Air at the Toronto Zoo.”

everything can be under strict control in this conservation mission, and indeed not everything went so smoothly when in 2012 a “giant surprise” almost thwarted the carefully designed breeding plan. Originally it was Er Shun and another bear, Ji Li, who were supposed to be sent to Canada, but back then Er Shun was thought to be a male panda. A genetic examination conducted at the Sichuan University and the Genetics Institute of the Chinese Academy of Sciences revealed that Er Shun is in fact a female. In this stalemate situation Da Mao, a male panda from Chengdu Research Base of Giant Panda Breeding, replaced Ji Li in her diplomatic mission. This kind of sex miss-assigning is common, because giant pandas are not sexually dimorphic, so it is extremely difficult to determine their sex without genetic testing from blood samples. Their external genitalia (organs typically recognized as biological markers of sexual difference) appear very similar regardless of sex. In pop-science literature, much attention is paid to the male panda’s penis size – visible only during intercourse and under three inches long, which according to the Morrises is “ridiculously short for so large an animal.”⁶⁶⁵

This preoccupation with the “unseen/absent” panda penis is in sync with the reproductive “failure” the species endures – sexual performance commonsensically is believed to depend on the sexual organs’ anatomy, and humans seem to pay extra attention to the size of male genitalia.⁶⁶⁶ Taking into account the significance of Freudian psychoanalysis in Western culture, sexual organs are critically tied to social schemes of gender, sexuality, and even race, especially through its reproductive function. If we agree that captive giant pandas persistently serve as figurations of racialized animality, the representation of male panda’s vanishing penis also aligns with “the missing Asian male phallus,”⁶⁶⁷ which Chen refers to when talking about queer animality and the materiality of the Asian body in North American context.⁶⁶⁸ This point of uneasy collapse between representations of human and nonhuman sexual embodiment is especially important given the focus on masculinity in the construction of Asian-Canadian identity as a result of predominantly male migration from China to Canada from the nineteenth century.⁶⁶⁹ It also critically links gender, sexuality, race and class.

⁶⁶⁵ Morris and Morris, *Men and Pandas*, 187.

⁶⁶⁶ For more on animals, genitals, and how it links to transspeciation, see chapter 5.

⁶⁶⁷ Chen, *Animacies*, 121; Fung, “Looking for My Penis: The Eroticized Asian in Gay Video Porn.”

⁶⁶⁸ See also, Eng, *Racial Castration*.

⁶⁶⁹ Ward, *White Canada Forever*, 109.

The difficulty in sexing pandas without medical intervention is one of many obstacles in realizing the captive reproduction mission, as the selection of breeding pairs gets more complicated. The Toronto Zoo's "gender trouble" is not an isolated case – in many instances "mistakes" in assigning sex have been made.⁶⁷⁰ Given this context the Toronto Zoo insists on reproducing a clear-cut gender difference between two almost identical bears. After leaving the Giant Panda Experience tent, and just before seeing the two main stars of this establishment, an outdoor banner instructs the visitors how to tell them apart: "Da Mao (the male) is a little bigger and has a wider face than Er Shun (the female)." The male is described against the female in terms of her lack – an unspoken rule of the zoo information plaques that tend to describe males as bigger, more colorful, and stronger than the females in various species, ignoring even the lack of gender dimorphism. Next, the personalized information banners about each panda leave no doubt about the artificial character of sexual difference imposed on nonhuman animals from a human naturalizing perspective. Er Shun's character traits enlisted on the banner include being "docile, lively and affectionate towards the zookeepers," while Da Mao is described as "lively, tender and quite a gentleman." This gender differentiation is a necessary element of building a credible story of a heterosexual romance between two nonhuman animals so similar in appearance and behavior that their sex can be only determined in the scientific laboratory. The same issue seems to be crucial in both of my other case studies, with spotted hyenas and penguins being species with little gender dimorphism.

Apart from questioning the naturalness of any sexual or gender identity, I think that there are more queer side-effects of giant pandas' gender ambiguity and (anti)sexual behavior patterns. The unwavering efforts to breed pandas and induce their sexual vigor result in a parodied version of heterosexual desire, and uncover the heavy stitching holding together the "romantic love story" in the not-so-natural environment of the zoo. More importantly, these actions and reproductive failures not only expose some sort of queerness of these nonhuman animals framed as ambassadors of wildlife protection, repro-sexuality or diasporic citizenship, but also to a certain extent queer the humans who intervene in pandas' sexual lives and those observing it. This queerness in my understanding entails undermining species

⁶⁷⁰ For example, Su-Lin, the first live panda to be displayed in the U.S. in the Brookfield Zoo outside of Chicago in 1930s, was believed to be female, and only postmortem examination revealed that it was a male. "Animals."

boundaries – it is a shared interspecies category that critically links sex, gender, sexuality, race and class.

Consider the practice of wearing panda suits by scientists working on the reintroduction of panda cubs to wildlife.⁶⁷¹ This peculiar mimicry introduced in order to help captive-born pandas in adapting to their natural environment results in an interspecies drag that unintentionally (I assume) resembles the queer subculture of “furry fandom.”⁶⁷² “Furries” are humans who identify with a nonhuman animal or its characteristics, and often dress up in costumes, or modify their bodies to resemble their totem; panda suits prove extremely popular in groups assuming interspecies affinity with “cute” animals.⁶⁷³ However, in the case of Chinese researchers and keepers in Chengdu and Wolong panda breeding centers who wear “panda drag” in the name of science, this zoomorphic mimicry is also an expression of postcolonial power relations, because they almost “become pandas,” in the sense that they act out a Western phantasy of making Chinese persons synonymous with pandas. What are the stakes in introducing such fantasy?

Eve Kosofsky Sedgwick, one of the founding mothers of queer theory, who was known for her deep fascination with pandas, explores another iteration of the “panda drag” phantasy.⁶⁷⁴ In her poem from 1993 *Pandas in Trees* she paints a scene of a playground, where a group of kids tries to shame a girl named Carrie for her fondness of pandas. Carrie not only knows a lot of facts about pandas, but also truly wishes to become one of the bears with “a round black nose and small black cookie-cutter ears.”⁶⁷⁵ Other children try to laugh at her love for pandas by stigmatizing it as abnormal. Their shaming tactics target the object of Carrie’s fascination: for other kids pandas are dull, passive, and unable to mate properly, because “boys and girls look just the same.”⁶⁷⁶ The blurring of clear lines between genders, as well as between adults and children (“Hal perceives them all as mummies. David thinks they look like

⁶⁷¹ Ruck, “Inside the Giant Panda Research Centre - in Pictures”; “Chinese Scientists Wear Panda Suits To Prepare Baby Pandas For The Wild.”

⁶⁷² Gerbasi et al., “Furries from A to Z (Anthropomorphism to Zoomorphism).”

⁶⁷³ According to Heidi Nast, a scholar of critical pet studies, furry fandom as a social phenomenon that often involves sexual practices, is another iteration of dominance-affection-love relations in the age of neoliberal economy that affect the lives of both human and nonhuman animals. Nast, “Loving...whatever: Alienation, Neoliberalism and Pet-Love in the Twenty-First Century,” 319.

⁶⁷⁴ Edwards, *Eve Kosofsky Sedgwick*, 96.

⁶⁷⁵ Sedgwick, “Pandas in Trees,” 178.

⁶⁷⁶ *Ibid.*, 179.

babies”⁶⁷⁷) seems to be especially perplexing for Carrie’s peers. Eventually, the protagonist of the poem finds another girl who shares her love of pandas, which becomes a point of “queer solidarity”⁶⁷⁸ between the two. In his biographical book about Sedgwick, Jason Edwards recognizes Carrie’s passion for bears as queer and truly transitive.⁶⁷⁹

However, I would like to focus for a moment on one argument that comes up in the poem’s heated playground discussion – a girl named Emma claims that pandas in the zoo are really “three small blue-suited Chinese boys who looked like spies”⁶⁸⁰ hidden in panda fur-coats with a Velcro opening. This paranoid fantasy outs Carrie’s queer interspecies desires as unpatriotic. Why doesn’t she adore Smokey the Bear? It does not necessarily anthropomorphize the giant pandas, but rather instrumentalizes these nonhuman animals as undercover agents of a foreign economic power. Moreover, the direct association of panda bears with Chinese proletarians infiltrating American economy in this childish conspiracy theory is another iteration of animal symbolism that cross-cuts species boundaries and intimately links issues of sexuality, gender, race, nationhood, class, and capitalism. Thus, a Western metropolitan zoo (in this poem the direct reference is to the Washington National Zoo), much like the harbor or the railway station in the nineteenth and twentieth centuries, becomes a dangerous site, an open gate for “unwanted others” to sneak into the heart of civilization in animal disguise. What would be the consequences of assuming that pandas (especially those in captivity) can symbolize Chinese migrants? Is there more to the all-too-literal transposition between the giant pandas and Chinese people when one takes a close look at the history of migration from China to Canada?

Sojourner Pandas

The coercive power of the zoo exhibition allows for creating a controlled environment for producing desired cultural meanings, and in the case of Er Shun and Da Mao, unequivocally frames panda bodies as desired migrants whose reproduction is technologically controlled under the watchful eyes of scientists and the general public. In this section, I show how in the context of pandas migrating/being shipped

⁶⁷⁷ Ibid.

⁶⁷⁸ Edwards, *Eve Kosofsky Sedgwick*, 91.

⁶⁷⁹ Ibid., 89.

⁶⁸⁰ Sedgwick, “Pandas in Trees,” 176.

from China to Canada they become a material-symbolic and power-charged expression of diasporic citizenship. In order to trace this traffic in meanings, which mirrors the colonial animalization of migrant bodies, I turn to the late-nineteenth- and early-twentieth-century racial relations in Canada when the pioneering industrial economy firmly depended on foreign labor, while the building of strong national belonging subsequently excluded some migrants from the ideal of the white Canadian nation.

To complete my depiction of racial signification in animal symbolism, I first arrange a “meeting” of two species that serve as strong national symbols in the context of the Canadian panda loan – I juxtapose the panda as China’s animal trademark and national treasure with Canada’s deployment of the beaver as a figurative brand of organic national identity, analyzed by Shukin in the introduction to her *Animal Capital*. She traces the fetishistic use of the beaver as a seemingly “innocent” symbol of national identity to the modernist project of building Canadian national unity in a colonial setting, which exploits an organic/animal metaphor, to paradoxically construct and naturalize the indigenous authenticity of a settler nation. For her, the symbolism of the Canadian beaver is also a reminiscence of the colonial contact and commerce that travels from the material/bodily currency of fur trade, to another kind of capital, later literally minted on coins:

The Canadian beaver constitutes a powerful nodal point within a national narrative that nostalgically *remembers* the material history of the fur trade as a primal scene in which Native trappers, French *coureurs de bois*, and English traders collaboratively trafficked in animal capital, at the same time as it advantageously *forgets*, through the symbolic violence of occupying the semiotic slot of indigeneity, the cultural and ecological genocides of the settler-colonial nation form mediating capital’s expansion.⁶⁸¹

Shukin poignantly locates animal capital mobilized in the case of the beaver within the dominantly white, Euro-Canadian discourse of national culture, demystifying the apparent racial, ethnic, linguistic, and gender neutrality and universality of this animal symbolism.

In a less straightforward way Uddin points to racial registers present in exhibiting giant pandas in Western zoos, when she analyzes the Panda Gardens in the National Zoological Park in Washington D.C. as an attempt “to breed naturalistic forms of American heterosexuality alongside members of a critically endangered

⁶⁸¹ Shukin, *Animal Capital*, 4.

species.”⁶⁸² By focusing mostly on the mechanisms of constructing heterosexuality as a national trait in the public display of “panda love” while domesticating the unknown China, Uddin bypasses racial aspects of this construction connected directly to the animals, or at least assumes that they follow the well-trodden path of national symbols emulating whiteness as a naturalized standard in the efforts to exhibit normative intimacy in the zoo. To the contrary, I argue that her analysis displaces pandas’ racial significance by neglecting the strong association of this species with its country of origin so carefully nurtured for centuries in a form of panda diplomacy I described in detail earlier. My interpretation of the Giant Panda Experience exhibit in Toronto Zoo considers the symbolic labor in making pandas synonymous with China (as well as with its political and economic interests), and therefore recognizes the crosscutting discourses of race, sexuality, gender, and class pervading this animal fetish. In order to unpack many layers of signification and more or less subtle racial references ingrown onto the panda exhibition in Toronto, I will now analyze the intimate interweaving of animality and racialization in the figure of “John Chinaman” prominent in turn-of-the-century Canada. As much as the beaver, according to Shukin, serves to naturalize and legitimize white settler colonialism, the panda symbolism in the specific context of contemporary Canada is employed to build another narrative of harmonious multiculturalism, or should I say, a multiracial society, where the history of Canadian sinophobia is being conveniently unremembered. The panda even managed to join the beaver in the currency animal capital, when a five-dollar Silver Maple Leaf coin was minted with a panda on it.⁶⁸³ Nevertheless, I still notice traces of past racial stereotypes firmly rooted in the careful construction of the panda exhibition and its message, and will try to expose them along the historical accounts of the place of Chinese migrants in the nascent Canadian nation.

“John Chinaman” was a common representation of Chinese immigrants in the nineteenth- and twentieth-century in North America. Among many other derogatory names widely shared among white Americans, the figure of the menacing John Chinaman was a cluster of racial stereotypes derived both from superficial knowledge about China based upon the accounts of travellers, diplomats and missionaries, and

⁶⁸² Uddin, “Panda Gardens and Public Sex at the National Zoological Park,” 82.

⁶⁸³ “2016 Canada 1 Oz Silver Maple Leaf Lunar Panda Privy.”

from home-grown anti-immigrant sentiments.⁶⁸⁴ The first accounts of Chinese migration to Canada date back to late eighteenth century. Until the next few decades, Chinese migrants concentrated mostly in the Pacific Northwest, with the largest settlements in Victoria and Vancouver. This migration was predominantly work-related, and in British Columbia contractors who needed a cheap workforce for realizing the grand dream of united Canadian provinces eagerly hired Chinese laborers for the construction of the Canadian Pacific Railway. According to John Gray, one of the commissioners' of the *Report of the Royal Commission on Chinese Immigration* from 1885 who was appointed to report on the "subject of Chinese immigration, its trade relations, as well as the social and moral objections taken to the influx of the Chinese people into Canada," out of 9,870 adult male Chinese migrants, about 7,200 were engaged in railroad construction, mining, farming, and canning throughout the province.⁶⁸⁵

Most anxieties mobilized against the Chinese newcomers in British Columbia were based upon the apparent danger to the economic status of white workingmen. While the public works' contractors and brokers praised Chinese laborers' efficiency, steadiness and aptitude for hard work, by accepting lower wages for the same labor and enduring difficult working conditions Asian workers were believed to pose a threat for their white counterparts. In the statement of the Knights of Labor (one of the largest labor organizations in North America) from 1884, Chinese migrants are blamed for taking white men's places in the labor market:

Did they come as settlers, and help to build up the country, there possibly might not be so much objection to them; but it is well known they only come to enrich themselves, without any thought of staying. **They are simply parasites preying upon our resources,** and draining the country of the natural wealth which should go to enrich it, and serve to still further develop it, but which all goes to their native land, from whence comes their chief supplies of food and clothing, and to which they invariably return dead or alive. They have no ties to bind them to this land; for they come without wives or families, and rarely make permanent investments, holding their property in such a form as can be easily realized upon, or carried with them. At least such is our experience: for out of 1,000 Chinese in this district only three or four have wives, while not one has made a permanent investment, thus proving the temporary nature of their residence. They live, generally, in wretched hovels, dark, ill-ventilated, filthy, and unwholesome, and crowded together in such numbers as utterly preclude all ideas of comfort, morality, or even decency, while from the total absence of all sanitary arrangements, their quarters are an abomination to the eyes and nostrils and a constant source of dander to the health and life of the community (emphasis mine).⁶⁸⁶

⁶⁸⁴ Ward, *White Canada Forever*.

⁶⁸⁵ Immigration, *Report of the Royal Commission on Chinese Immigration*, VIII.

⁶⁸⁶ *Ibid.*, 156.

The stick figure of John Chinaman appears here as an amalgam of racist stereotypes, most of them stemming from economic exploitation of Chinese workers, treated by their white entrepreneurs as a handy reservoir of unskilled, cheap labor. In the heart of rapidly industrializing Canadian economy, Chinese laborers constituted a surplus population that could not enjoy the political and economic privileges already limited for white workers, thus, revealing the not only classist, but deeply racist character of the nation-forming processes in early capitalism.

In the eyes of many British Columbians, the hostile image of John Chinaman arose as a serious threat to public physical and moral health, spilling out of the overcrowded quarters in Chinatowns, from the fumes of opium smoke, and lurking from the darkness of gambling dens. What seems to be the key feature of the Chinese migrant from the above lengthy quote was his apparent un-assimilability – an obstacle to the project of homogenous Canadian society. The graphic/crude comparison to parasites shows that for the host community the Chinese with no prospect or intention to become permanent settlers, were one of the most undesirable migrants, and that this undesirability was strikingly represented through depicting them as nonhuman. The following excerpt from the *Report of the Royal Commission on Chinese Immigration*, where Mr. Thompson from Cariboo explains why he objects Chinese presence in the province, exemplifies the racist basis of this conviction:

This is the case, because they are a separate race from the whites. They do not amalgamate with the whites nor do they adopt our customs. They live among themselves. They have their own religion and also they have secret societies, by means of which to a very great extent, they are governed. They contribute very little to the wealth of the country, and to a certain extent, they impoverish it by competing with white men who, if they settled permanently in the country, would improve it.⁶⁸⁷

In *White Canada Forever* W. Peter Ward argues that the stereotype of the “unassimilable Asian” was the most prominent racial characteristic, vividly present in the west coast imagination. According to him, “the ultimate promise of Chinese immigration thus seemed the creation of a permanent, alien presence in the heart of the west coast province.”⁶⁸⁸

Ward notes that the social background of the Chinese immigrants plays an important role in the way they were perceived by the white population in British

⁶⁸⁷ Ibid., XXI.

⁶⁸⁸ Ward, *White Canada Forever*, 13.

Columbia – it was an intermingling of peasants and merchants coming from the same province in southwest Canton.⁶⁸⁹ Migration driven by economic motives brought mostly males of working age who did not invest much in the place of their work, but were committed to supporting their families back in China. This specific gender composition of the migrant population fueled many anti-Chinese sentiments concerned with racial hygiene and focusing on the migrants’ mysterious sexuality. According to historian Margot Canaday, during the Progressive era “the association between racial difference and sexual deviance was first and most clearly articulated in the case of Chinese migrants.”⁶⁹⁰ Moral depravity was believed to spread from the “improper” intimacies of male homosocial spaces, and from the unruly bodies of the few Chinese women in the community, who were commonly classified as sex workers by the whites. Another excerpt from the Report states: “it is said these women bring with them a most virulent form of syphilis, and that in a special way they corrupt little boys.”⁶⁹¹

Racial hygiene was thus closely tied to the preoccupation with sexual and personal hygiene. The white Canadian public was terrified by the vision of epidemics spreading from lascivious Chinatowns and the unregulated bodies of migrant men and women. In those racist beliefs dangerous diseases mutated into new, unrealistic forms, including a conviction that all Chinese are inherently leprous to “a certain disease introduced by them called the China-pox, distinguished from other syphilis by that name.”⁶⁹² It seems that for the European settlers, the mere presence of non-white migrants was “a venereal disease of the social body,”⁶⁹³ to use Haraway’s words. Many of those racist beliefs were contradictory: on the one hand Asian migrants were accused of not establishing any “healthy” ties in Canada (especially in the only imaginable way, that is by forming families), while on the other hand their sexuality was already constructed as inherently contaminated, contagious, and dangerous for the Canadian society’s immunological system. Italian philosopher Roberto Esposito takes up the metaphor of immunization in his conceptualization of modern biopolitical communities governed like a living organism, which needs to defend

⁶⁸⁹ Ibid., 15.

⁶⁹⁰ Canaday, *The Straight State*, 28.

⁶⁹¹ Immigration, *Report of the Royal Commission on Chinese Immigration*, xxix.

⁶⁹² Ibid., 354.

⁶⁹³ Haraway, “Race: Universal Donors in a Vampire Culture,” 252.

itself from external threats.⁶⁹⁴ In this sense, Chinese migration was constructed as a threat to public safety and more generally to the healthy national body and its racial integrity.

Anti-immigrant sentiments are usually deeply concerned with the reproductive capacities of “alien” populations, and tend to attempt to control their sexualities. Fear of the “Yellow Peril” is an equivalent of this common xenophobic trope, but it took a slightly different turn in the context of Canadian settler colonialism. The source of overpopulation was not recognized as unregulated sexual reproduction, but rather in the untamed influx of new migrants from China, who “would over-run the land like grasshoppers.”⁶⁹⁵ After many attempts to legally halt this migration, the Chinese Immigration Act was passed in 1885 imposing a \$50 fee on every Chinese person coming to Canada – an exclusionary measure targeted exclusively at this ethnic group.⁶⁹⁶ This Head Tax was later increased to \$100 in 1900, and then to \$500 in 1905, to culminate in an almost full prohibition of Chinese settlement in Canada with the introduction of the Chinese Exclusion Act from 1923. The enforcement of this discriminatory law on July 1st coincided with the Dominion Day (now Canada Day) – a celebration of the union of the three colonies. The already settled Chinese-Canadians, who also faced consequences of the Act, boycotted the celebrations and renamed it “Humiliation Day.”⁶⁹⁷ They closed their businesses every July 1st until 1947 when the racist act was repealed – officially in recognition of Chinese Canadians’ role in the Second World War, and legally because it stood in stark contradiction with the United Nation’s Charter of Human Rights undersigned by the Canadian government at the conclusion of the War. Finally, in 2006 Prime Minister Harper issued an official apology (in Cantonese) and offered compensation for this exclusion that he said was “inconsistent with the values that Canadians hold today.”⁶⁹⁸ What values became crucial for Canadian national identity in the end of the twentieth century?

With the Canadian Charter of Rights and Freedom (1982) and the Canadian Multiculturalism Act (1985) multiculturalism has become an official state policy. Along with the investment in the politics of multiculturalism and a knowledge-based

⁶⁹⁴ Esposito, *Immunitas*.

⁶⁹⁵ “Select Committee on Chinese Labor and Immigration,” 14.

⁶⁹⁶ “Chinese Immigration Act 1885.”

⁶⁹⁷ “The Chinese Experience in British Columbia: 1850-1950.”

⁶⁹⁸ “Prime Minister Harper Offers Full Apology for the Chinese Head Tax.”

economy, the image of Chinese migrants in Canada switched from the rhetoric of “drain to the economy” to the so-called “brain gain.” According to a survey of Chinese millionaires by the Bank of China and Hurun Report from 2011, 37% of the richest Chinese have chosen Canada as their migration destination.⁶⁹⁹ Chinese Canadians make up the second largest visible minority group in Canada, and the population keeps growing.⁷⁰⁰ The peculiar category of a “visible minority” reveals the mechanism of differentiated inclusion into the body of the nation, and especially the color-coding underlying any multicultural liberal identitarian project. This kind of accentuating racial visibility as an instrument of the new assimilation policy stands in line with the biopolitical project of managing populations and regulating difference, and thus supports the official Canadian model of multiculturalism, which, according to Tomasz Sikora, “works to *prevent* hybridization rather than to promote it, it stabilizes difference and attempts to regulate it by the legal machinery of the modern state, in its various shapes and versions.”⁷⁰¹

Peter Li asserts that, “ironically, the much-celebrated multiculturalism policy of Canada that came into effect in 1971 has promoted only a superficial appreciation of minority cultures. ... The result is that minority culture and arts tend to be appreciated in Canadian society less for their artistic merits than for the exotic contrast they represent to Western aesthetic traditions.”⁷⁰² The Giant Panda Experience Exhibit aligns well with this critical account of the “multikulti” fascination with Oriental aesthetics, where the nonhuman animals’ physical presence serves as an excuse for a spectacle of cultural appropriation. With the ever-present bamboo patterns, red accents and titles in hànzì (Chinese script), the Toronto Zoo’s panda exhibition design follows a common zoo practice of envisioning animals in the human cultural context of their place of origin. The official press release from the launch of the interpretative center states: “The clean white lines of the tent’s interior space have been punctuated with vibrant red accents which celebrate Chinese culture and traditions, while bold black and white structures play off the Panda’s iconic appearance.”⁷⁰³ Vast spaces, moderate minimalism and sanitized wilderness bring the defining features of Canadian landscape (its vastness, harshness, and wildness) into

⁶⁹⁹ Page, “Many Rich Chinese Consider Leaving.”

⁷⁰⁰ Lindsay, *The Chinese Community in Canada, 2001*.

⁷⁰¹ Sikora, *Bodies Out of Rule*, 17.

⁷⁰² Li, *Chinese in Canada*, 155–58.

⁷⁰³ “Reich+Petch Designs Highly Anticipated Panda Interpretive Centre at the Toronto Zoo.”

the exhibition of an exotic species, and at the same time affirm the modernist approach undertaken in the exhibition design.

In his essay on the modernist architecture introduced in the London Zoo in 1930s, geographer Prys Gruffudd shows how architecture used the close interweaving of human and nonhuman spaces and turns the zoo into an experiment in social engineering. As opposed to the naturalistic approach in exhibition design that attempts to recreate the critters' natural environment, modernist architecture aims at bringing out the essence of the animal itself. According to Gruffudd, "the cultivation of the perfect animal body in the enclosures stood not so much as a metaphor *for*, as an experiment in, the cultivation of the perfect human body with which so many modernists were concerned, and to which so much modernist aesthetics alluded."⁷⁰⁴ Just like in Gruffudd's example where "penguinness" is being produced through theatrical enclosure design, so that the most characteristic features of those tuxedo-wearing creatures are accentuated by the elements of the zoo exhibit,⁷⁰⁵ the Giant Panda exhibit in the Toronto Zoo with its hygienically controlled environment and minimalistic design, produces black and white bears as exotic ambassadors of wildlife protection, an iconic endangered species, and most importantly, through recuperated Asian modern migrants. The cult of perfect panda reproductive bodies through the exhibition design turns them into desirable migrants. As Robert Kroetsch writes in his famous essay "Disunity as Unity": "Canada is supremely a country of margins, beginning from the literal way in which almost every city borders on a wilderness."⁷⁰⁶ In the exhibition the animals are positioned against this Canadian wilderness that has been properly trimmed and tamed for them.

Taking into account Catriona Sandilands' argument about the nineteenth-century North American investment in urban nature spaces (such as parks, botanical gardens and zoos) as a form of retreat from the corrupting filth of industrializing cities,⁷⁰⁷ the contrast between the insistence on purity in the present panda zoo exhibit and the racist construction of Chinatowns as an unclean source of disease can be read as a reparatory measure introducing still racialized, gendered, and classed ideals of moral purity. Arguably this kind of selective intervention into the fragile tissue of

⁷⁰⁴ Gruffudd, "Biological Cultivation Lubetkin's Modernism at London Zoo in the 1930s," 238.

⁷⁰⁵ *Ibid.*, 230.

⁷⁰⁶ Kroetsch, "Disunity as Unity," 62.

⁷⁰⁷ Mortimer-Sandilands, "Unnatural Passions?," 6.

national memory is part of the official state multiculturalism. In his contribution to the theoretical project of queer ecology, Andil Gosine suggests that in the mainstream environmentalist discourses two types of sex are being constructed as toxic to nature: reproductive sex between nonwhite people and same-sex eroticism.⁷⁰⁸ He demonstrates the stakes of Euroamerican environmentalism in the project of white nation-building, where it is the sexual activity of its “Others” that poses an ecological threat to the integrity of the nation body equated with nature. To unearth these sexual anxieties complicit with the colonial-nationalist project, Gosine examines how the North American environmentalist discourse uses overpopulation propaganda, which aims at regulating the dangerously over-reproductive non-white sex. This approach is combined with the policing of homosexual sex in parks and beaches as polluting and destructive to both the urban environment and social morals. According to Gosine, together the discourses on the ecological dangers of overpopulation and homosexuality are premised on the production and cultivation of white heteronormativity.

Gosine recognizes that his own analysis can be accused of implicitly reinforcing “a separation of the queer subject from the racialized-as-non-white subject; that is, subjects are seen to occupy either position, not both, in effect disappearing the non-white queer and ... the diasporic subject.”⁷⁰⁹ In this context, I see the giant pandas in the Toronto zoo as occupying exactly this vanishing point of non-white queer diasporic subjectivity. This might seem controversial given that for Gosine this subject is cast as “a deadly and dangerous deviant, through tropes of HIV/AIDS,”⁷¹⁰ while the pandas are welcomed guests in the Canadian zoological parks and their reproduction is demanded, rather than prohibited. However, this paradox along the shift in the nation-building rhetoric is exactly what I want to expose by juxtaposing the turn-of-the-century anti-Orientalist narratives that construct Chinese workers as a threat to Canadian national unity with the contemporary multicultural use of the giant pandas as model diasporic subjects whose sexuality is regulated in the controlled environment of the zoo. It is not sex or its absence that makes giant pandas queer subjects in my analysis, but rather this troubled positioning within the colonial-capitalist anti-extinction project.

⁷⁰⁸ Gosine, “Non-White Reproduction and Same-Sex Eroticism: Queer Acts Against Nature,” 149.

⁷⁰⁹ *Ibid.*, 167.

⁷¹⁰ *Ibid.*

It would be easy to jump into a conclusion that pandas are queer due to their low fecundity and failure in performing the heterosexual intimacy, that they come to represent the non-reproductive, or even pro-extinction death drive constitutive of queer desire pit against “reproductive futurism.”⁷¹¹ The problem with this interpretation is that it instrumentalizes and exploits non-human animals for human politics (maybe for the sake of the queer “no future” movement), and again overlooks the racial signification of the animal symbolism employed in panda diplomacy. My understanding of queerness encompasses species, class, and racial divisions and is not limited to sexuality. Therefore, I suggest that the giant pandas are queer subjects as figurations of racialized diasporic citizenship that, analyzed along the historical accounts of settler-colonial sinophobia uncovers the capitalist stakes and the importance of sexuality and gender to any nationalist project. As Gosine writes, “Nationalism is always predicated on racialized heterosexuality, as the survival of nations demands the reproduction of bodies.”⁷¹²

My comparison between pandas and migrants is not an easy one to make, especially given the politically charged history of the animalizing language and imagery in North American anti-Orientalist discourses. As well described by Chen, “animality ‘sticks’ indelibly to specific races,”⁷¹³ and in the case of Asian body it was marked by racialized animality deeply concerned with aspects of gender and sexuality – from the feline emasculation of Fu Manchu⁷¹⁴ to the hypersexual “dragon lady.” The mysterious Asian sexuality often bears traces of “primitive animality,” and the mystery itself is part of the allure for Westerners.⁷¹⁵ In “Queer Human Rights in and Against China” Liu examines this West-East dialectic so deeply concerned with issues of gender and sexuality on the level of philosophical theories shaping our understanding of modernity. Liu writes:

China is rarely invoked and studied as an object of critical interest itself; rather, China provides an ethnic specimen for antihumanist thought, a logic of supplement against which the entirety of Western logos comes undone, its metaphysics deconstructed, its hegemony challenged, and its attendant universals successfully refused. ... The *human* and the *Chinese* appear to be mutually exclusive terms, as though we must first accept this mutual exclusivity in order to emancipate ourselves from the totalizing clutches of European theory.⁷¹⁶

⁷¹¹ Edelman, *No Future*.

⁷¹² Gosine, “Non-White Reproduction and Same-Sex Eroticism: Queer Acts Against Nature,” 156.

⁷¹³ Chen, *Animacies*, 2012, 115.

⁷¹⁴ Chan, *Chinese American Masculinities*.

⁷¹⁵ Lee, *Orientalism*.

⁷¹⁶ Liu, “Queer Human Rights in and against China Marxism and the Figuration of the Human,” 76.

Digging into the roots of Western poststructuralism, Liu accuses Foucault and Kristeva of perpetuating the image of China as a land “outside” of history. He points to the insurgent Orientalism in Foucault’s famous distinction between *scientia sexualis* and *ars erotica*, where Western civilization developed into having a science of sexuality, leaving China (along other colonized lands) at the stage of the ancient tradition of an “art of love.” Foucault argues: “On the one hand, the societies – and they are numerous: China, Japan, India, Rome, the Arabo-Moslem societies – which endowed themselves with *ars erotica*. ... [O]ur civilization possesses no *ars erotica*. In return, it is undoubtedly the only civilization to practice a *scientia sexualis*.”⁷¹⁷ For the founding father of queer theory “the homosexual as a species” could only evolve in the modernizing Western world, while the bestiary of Eastern sexualities remained in the primitive, easily animalized, but curious domain of mystery. In a similar manner Western representations of the giant pandas highlight their mysterious sexual behavior patterns and tend to spring out in times of heightened economic or diplomatic mobility.⁷¹⁸

In the case of the nineteenth- and twentieth-century backlash against Chinese immigration the animalistic figurations of race took the form of an unstoppable wave of uniform, alien-like organisms. The issue of reproduction is therefore critically linked to modes of production. Along the lines of the old adage “all Orientals look alike” the Yellow Peril was envisioned either as a plague threatening Canadian resources (grasshoppers), or a parasitic draining of the economic vitality of the healthy national body. Even given that this body was more of a patchwork like Frankenstein’s monster, the biggest sin in the settler-colonial logic was to refuse assimilation. Therefore, the sojourner condition of Chinese laborers was one of the most prominent reasons for white citizenry’s anti-Asian sentiments. For example this passage from the *Royal Report on Chinese Migration* illustrates how a pseudo-Darwinian evolutionary discourse was employed in an anti-immigrant rant: “Just as one of the lower animals will go and remain where he is fed, so the Chinaman will go

⁷¹⁷ Foucault, *The History of Sexuality*, 1988, 57–58.

⁷¹⁸ “Those representations, and their meanings, were shaped by cultural assumptions about nature and sex, by shifting geopolitical conditions, and by an intransigent Orientalism that has long constituted Western images of the East. The panda emerged as a topic of interest to the print media in the 1970s and as a documentary subject in the 1980s as a result of new diplomatic activity between East and West.” Chris, *Watching Wildlife*, 194.

and stay for a certain time in any place where he is paid a certain wage, admittedly not high.”⁷¹⁹ Another example strikes me as an important point of reference to a figuration of the giant pandas as sojourners of zoos around the world. The royal commissioner Grey reports:

I have been informed by Chinamen themselves that they give bonds, before leaving China, to Chinese companies, to work for them for a term of **from five to ten years**, and all that the Company have to do in order to carry out their part of the contract, is to furnish them with the bare necessities of life and their clothing, and the company have all their earnings. After they serve their time, of course they go then and work for themselves and make as much money as they possible can and go back to China as quickly as possible (emphasis mine).⁷²⁰

The overlap between the Chinese migrants’ five- to ten-year work contracts and panda loans designed to “rent” the animals to Western zoos for ten years (in the case of the most recent Canadian loan, the time was divided between the Toronto and Calgary zoos, five years each) might be just a coincidence, but it undoubtedly restages both the route and time spent in Canada by Chinese migrant workers in the nineteenth and twentieth century.⁷²¹ This “traffic in HumAnimals” links human and nonhuman bodies across history in another figuration of racialized animality. Er Shun and Da Mao are just temporary guests in Canada. They are not supposed to create any strong bonds there, except for the sexual and reproductive ones between each other – their “work contract” requires them to reproduce successfully. They are made into another type of sojourners – an exotic, portentously welcomed precious resource, whose political significance extends beyond the task of zoo entertainment and into the spheres of diplomatic relations and international trade agreements. The Toronto Zoo becomes a site of restaging Canadian-Chinese relations according to the rules and values of official state multiculturalism, which on the one hand embraces the Oriental exoticism of the guests, and on the other conveniently forgets the persistent exclusion and violence against Chinese migrants at the historical birth of national unity. If for Shukin “under the universal alibi of species life, proverbially innocent of political designs, the Canadian beaver subtly counter-indicates the relinquishment of white English cultural and economic privilege pronounced by official state multiculturalism,”⁷²² then the Chinese pandas visiting the Toronto Zoo can be read as

⁷¹⁹ Immigration, *Report of the Royal Commission on Chinese Immigration*, XCV.

⁷²⁰ Ibid., XXV.

⁷²¹ While the migrants in the nineteenth and twentieth century took about a month to travel from Hong-Kong to Canada via a ship, the giant pandas were aboard a special plane to ship them to Toronto in about 20 hours.

⁷²² Shukin, *Animal Capital*, 4–5.

racialized figures of ideal migrants, new sojourners in the context of the new direction of Canadian multicultural politics towards embracing the rapidly industrializing Chinese economy. This change comes at a time when Chinese-Canadians are cast as a model-minority, and the un-assimilability of migrants is no longer an obstacle for flexible capitalism, benefiting from any unfixed surplus labor in the global North.

According to Chen, “animals serve as objects of almost fetishistic recuperation, recruited as signifiers of ‘nature,’ or ‘the real,’ and used to stand in for a sometimes conflicting array of other cultural meanings (including fear, discipline, sexuality, purity, wisdom, and so on).”⁷²³ However conflicting and complicated the cultural meanings activated in the case of Er Shun and Da Mao might seem, as “token Asians” they are employed to recuperate the terms and conditions of the Chinese presence in Canada and ensure a steady flow of economic goods between the superpowers in the future. Public rituals mobilized around this visit confirm the high stakes of this animal spectacle. These rituals became even more pronounced after the breeding efforts in the Toronto Zoo succeeded. After failed attempts to mate Er Shun and Da Mao, the female panda was artificially inseminated with the sperm of two additional panda males sent from Chengdu. In October 2015 the Toronto Zoo proudly announced the birth of two giant panda cubs, as the first representatives of this species being born in Canada. The labor took place between 3:31 and 3:44 am, but anyone could watch it online thanks to a camera installed in the maternity holding area of the Giant Panda House. The video shows the female panda named Er Shun from above as she is tightly holding the cage bars while giving birth to the long awaited twins, and thus giving visual access to the spectacular success of the internationally managed breeding program involving hi-tech reproductive technologies like DNA testing, artificial insemination, and ultrasound monitoring of the pregnancy. The surveillance type camera zooms in and out trying to follow the tiny pink bodies of the newborn cubs while the milliseconds are flickering in the frame of this panda family video. Broadcasting zoo births is extremely popular and the newborns often make the headlines not only of the local newspapers, but sometimes even the international media outlets.

Consider the naming ceremony of the giant panda cubs in the Toronto Zoo held on March 7, 2016, almost a year after they were born. Important politicians,

⁷²³ Chen, *Animacies*, 2012, 100.

including Prime Minister Justin Trudeau and Chinese Ambassador to Canada Lou Zhaohui among others, joined the event.⁷²⁴ The viral picture of the newly elected Prime Minister holding the twins (Fig. 7) that I mentioned in the introduction to this chapter comes from this event. After official speeches and obligatory photo-shoots all honorable guests gathered in front of the cameras with two boards hiding the names of the cubs. Those boards materialize the stakes of this breeding success and reveal more than just the names of the new zoo celebrities – the writing was both in Latin and in hàn zì and the boards were properly gendered with pink for the female and light blue for the male cub. The name reveal ceremony followed a public vote and the chosen names were Jia Pampan for the male, which translates into “Canadian Hope,” and Jia Yueyue for the female (“Canadian Joy”). These new baby pandas born in the Toronto Zoo with their hybrid names, which are still suggestive of Canadian ownership, are the embodiment of diasporic citizenship. The haunting presence of the past comes with another image from the naming ceremony showing the officials holding a frame with panda paw-prints – a reminiscence of the border regime.

Panda Symbolism

In March 2014 a peculiar poster with an easily recognizable representation of a giant panda attracted my attention while I was walking the streets of Budapest. It was an electoral poster of one of the right-wing parties that emerged in Hungary just before the parliamentary elections (Fig. 10). Its textual message translates into: “Hungarian, working, heterosexual. Sentenced to extinction? No! New Hungarian party ÚMP – the new FORCE.” The giant panda’s iconic status as a primary symbol of nature conservation and a species threatened with extinction is used here to mobilize Hungarian voters, and convince them that they are also such unique, rare creatures worthy of special protection. The deployment of an exotic and foreign animal as a main representation is not the only thing striking in this example, but also the fact that the three main characteristics used to stitch this interspecies identity transfer are national belonging, class, and sexuality. Despite the strong association of pandas with China, in this case they are used to symbolize Hungarian citizens. Not just any citizens, but those “proper” ones – in the right-wing political vocabulary it translates into hardworking, white (meaning non-Roma) heterosexuals, whose

⁷²⁴ “Toronto Zoo | Giant Panda Cubs.”

existence seems to be under constant “threat” due to liberal political agenda recognizing minority groups’ rights. It is also possible that another intention behind the association with pandas is rather a negative one, as in “we don’t want to become another extinct species,” to hint at the population decline argument so popular among conservative political parties in mobilizing its electorate.



Figure 10. Election poster, Budapest (2014). Photo by author.

In order to make its political argument clear the poster uses a well recognizable symbol of environmental protection, the famous logo of the World Wildlife Fund – ironically a possible infringement of the organization’s copyright. This temporary interspecies union between Chinese giant pandas and Hungarian human voters is purely instrumental and symbolic, but not coincidental. Giant pandas have served as common currency in the flows of animal capital, exploited both symbolically and materially in human political practices for centuries. The story behind the WWF logo used by Hungarian conservatives is no exception. The case of Chi Chi – the panda, which inspired the WWF logo – is exemplary of the complicated entanglement of animal trade and international politics. Between 1957 and 1958 animal brokers moved Chi Chi from Sichuan through Beijing to the Moscow Zoo, and then shipped her to Tierpark Zoo in East Berlin from where she was sold to the Chicago Zoo. However the one-year-old bear was barred entry to the U.S. – the panda could not get through customs and immigration due to American government’s stoppage of all trade with communist China.⁷²⁵ She finally crossed the iron curtain, and after being moved from zoo to zoo as a star attraction, in 1958 she was acquired

⁷²⁵ Cushing and Markwell, “Platypus Diplomacy.”

by the London Zoo to become one of Britain's top animal celebrities.⁷²⁶ The peak of Chi Chi's fame coincided with the founding of one of the largest conservation organization, and the emerging WWF needed a strong, recognizable symbol that would overcome all language barriers. One of the WWF's founders and the author of the first logo said: "We wanted an animal that is beautiful, is endangered, and one loved by many people in the world for its appealing qualities. We also wanted an animal that had an impact in black and white to save money on printing costs."⁷²⁷ I find it ironic that the animal, which became one of the most recognizable symbols of wildlife conservation, was an object of animal trade, had to endure long travels solely for human entertainment, and lived its entire life in captivity. Actually Chi Chi remained on display even post mortem – after her death in 1972 she was stuffed and is still showcased in London's Natural History Museum.

What is even more ironic is the route that a representation of one particular panda bear can take in the global traffic in HumAnimals. From being the international emblem of wildlife protection struggle, to representing a small European nation's Malthusian anxieties, the giant panda, just as any other nonhuman animal, can be used in shaping even the most conflicting values and political messages. The traffic in HumAnimals capitalizes on those ambiguities and uses the leaps between its porous boundaries to co-join human and nonhuman lives in an endless production of natural-cultural meanings. Most importantly, those meanings are not a shapeless, disorganized information noise, but are rather arranged along the entangled hierarchies of race, class, gender, and sexuality to consolidate ideals of what is considered normative. Race and sexuality are the focal points of regulatory regimes that exploit the idea of nature. The zoo as a contact zone and a regulatory space consolidates and naturalizes the ideals of sexual difference and heterosexual reproduction by writing the script of the panda love story, and inciting public curiosity about their sexual lives. As Sandilands argues in relation to the emergence of environmentalism in the U.S.: "Nature was, here, a space of intensive moral regulation; given the increasing association of sexuality with ideas of nature, sex became a key element in the organization of nature as a regulatory space."⁷²⁸ The strict regulation of pandas' sexual behavior through reproductive technologies

⁷²⁶ Brambell, "London Zoo's Giant Panda."

⁷²⁷ "50 Years of Environmental Conservation."

⁷²⁸ Mortimer-Sandilands, "Unnatural Passions?," 12.

overwrites the racial difference imposed on these animals with a biopolitical scenario of highly controlled populations.

As Haraway puts it, “[o]nce domination is complete, conservation is urgent.”⁷²⁹ She points to continuity between the colonial project, that claims the right to manage resources and populations, and Western environmentalism, which deterritorializes nature as a paramount value, turning the previous colonizers into nature’s spokespersons, the only ones able to effectively represent its interests. This relationship can be also observed in the international politics of panda protection, where Western specialists function as “true experts” in wildlife conservation, while Chinese scientists are oftentimes framed as incompetent, business-oriented charlatans. For example, this is what Kati Loeffler, an American veterinarian, member of the International Fund for Animal Welfare in Massachusetts and former director of animal health at Chengdu, said in an interview about China’s wildlife protection: “Conservation there is a joke. It’s all about politics and money. If the west was not interested in pandas, the Chinese would start eating them.”⁷³⁰ This bold statement is a clear illustration of how Western environmental concerns can easily slip into a neocolonial “white savior of Nature” narrative that strongly perpetuates racist prejudices. There are a few layers to Loeffler’s problematic racist construction: Chinese are represented as not serious about conservation (“faking” it), greedy, barbarous, and even inhuman impostors of Earth’s stewardship. In this classic colonialist strategy certain cultural practices (like dietary habits) are being singled out, and ethnicities or cultures are shamed and constructed against the idea of Western “civilized” treatment of nonhuman animals.⁷³¹ Wildlife reserves in the colonized world displace indigenous human populations, which are seen as an imminent threat to the pristine nature, and even if they are directly engaged in nature conservation they are often disqualified as incompetent. Many Western critiques of China’s wildlife conservation as a business and a marketing stunt completely overlook the same capitalist mechanisms in place in the global North.

In this chapter, my aim was to uncover the kind of neocolonial tropes interwoven into the contemporary nature conservation discourses and practices. My

⁷²⁹ Haraway, *Primate Visions*, 34.

⁷³⁰ Vidal, “Zoos Weigh up the Costs of China’s ‘Pandanomics.’”

⁷³¹ See, Part 2, on “The Battle over Live Animal Markets in San Francisco’s Chinatown” Kim, *Dangerous Crossings*, 101–39.

main focus was on the intertwined routes that the categories of race, gender, sexuality and class take in travelling through such varied spatio-temporal realities as zoological exhibitions, histories of migration, nation-building narratives and environmental politics. It might seem that by studying just one particular species exhibit in the Toronto Zoo my research oscillates at the fringes of the global “traffic in HumAnimals.” However, I turn to the particular in order to precisely map out complex relationships, flows, and stories so tangibly implicated in animal symbolism. Through delineating those trajectories within discourses on nature I hope to trace queerness even in the seemingly most normative forms of intimacy cultivated in the zoo. In this sense, the non-behaving, under-reproductive panda bodies are a perfect example of queer distortion to the normative idea of an always re/generative nature.⁷³² This approach reveals queerness as an inherently interspecies ontology, as well as deeply imbricated in materialist and speculative notions of race that dwell on the human/nonhuman boundary.

Race is the focal point of this chapter, because I observed a serious lack of engagement with postcolonial theory and critical race studies in the area of the social research of animals. In most animal studies research, race functions as a marginal concern – still a key category to mention, yet light-heartedly enumerated along other markers of power without any in-depth analysis of its workings in human-nonhuman relationships. Therefore, in my analysis I theorize race as an ontological position, rather than a fixed subjectivity, so that it is not an easily naturalized category, but still one with a strong tendency to appear along the heavily policed borders of what is called the realm of “Nature.” That is why certain nonhuman animals become racialized subjects and as such can be a vital part of the interlaced processes of colonialism, nation-building, and capitalism. Within this framework I show how the spectacle of pandas as “ambassadors” of China in Canada eminently links the panda exhibition in the Toronto Zoo with the history of human migration from China to Canada. In this sense, Er Shun and Da Mao become not only the potent symbols of

⁷³² In terms of “queer nonhuman rebellion” consider the case of Ai Hin, a giant panda who simulated pregnant behavior to receive better treatment in the Chengdu Breeding Research Center. Given that each panda pregnancy is much celebrated, this clever trick from a captive wild nonhuman animal – a “faked” pregnancy in order to be upgraded to a better enclosure and receive better food and care – at least for a moment hacked the reproductive system of animal husbandry sustained in the name of environmental protection. AFP, “Giant Panda ‘faked Pregnancy for Extra Treats and Nicer Accommodation.’”

the Canadian-Chinese oil-fueled friendship, but also a furry embodiment of a specific kind of diasporic citizenship, haunting the multicultural harmony with its settler-colonial past. By juxtaposing the contemporary display of sojourner pandas' highly controlled sexuality with the turn-of-the-century fear of "Yellow Fever" or "Asian Invasion" I reveal the meandering trajectories of humanizing and dehumanizing drives that are the heart of traffic of HumAnimals.

Conclusions

Sexual and gender variance in animals offer a key to a new way of looking at the world, symbolic of the larger paradigm shifts currently underway in a number of natural and social sciences.

– Bruce Bagemihl “*Biological Exuberance*”

Homosexuality is a historic occasion to reopen affective and relational virtualities: not so much through the intrinsic qualities of the homosexual but because the “slantwise” position of the latter, as it were, the diagonal lines he can lay out in the social fabric allow these virtualities to come to light.

– Michel Foucault “*Friendship as a Way of Life*”

In December 2015, a heartwarming story of an unlikely friendship between a tiger and a goat in a Russian zoo circulated in international media. Earlier, the Primorsky Safari-Park reported that a Siberian tiger named Amur befriended a goat, which was released to Amur’s enclosure alive, intended as a meal. After the two were observed engaging in play behavior instead of the expected hunt, the goat was named Timur and was allowed to stay in Amur’s enclosure. Videos and pictures of the harmonious co-existence between the predator and its prey have been shared widely on social media, making the small zoo in Russia’s far eastern Primorye region world-famous for a moment.⁷³³ Experiencing a significant increase in visitors the Safari-Park quickly capitalized on the story. Following this viral trend, the zoo’s webpage headlined the famous couple and provided first-hand information on Amur and Timur via their own webcam livestream and fanpages on social media, often featuring other examples of interspecies friendships.⁷³⁴

However, not everyone was thrilled about the friendly tiger and fearless goat: Alexei Krestianov, a lawyer from Novosibirsk, issued an official letter to Russia’s General Prosecutor’s Office to ban future coverage of the story because of its potential harm to children, “arousing interest in non-traditional sexual relations.”⁷³⁵

⁷³³ Dolgov, “Tiger and Goat Form Unlikely Friendship at Russian Zoo”; Interfax and RBTH, “Tiger Amur and Goat Timur Play Game of Tag in Primorye Safari Park”; McCluskey, “This Unlikely Friendship Between a Tiger and a Goat Will Brighten Your Day.”

⁷³⁴ “Primorsky Safari Park.”

⁷³⁵ “Russian Lawyer Claims Coverage of Tiger-Goat Friendship Is ‘Gay Propaganda’”; Madhavan,

The concerned lawyer noticed that both animals are male and thus considered their co-dwelling in the zoo a “non-traditional co-habitation.” In this way, he referred to the law against “gay propaganda” protecting “traditional family values” adopted by the Russian State Duma in 2013. Krestianov wrote: “I think the positive coverage of this topic is nothing less than interference in the personal lives of minors, which is what hidden propaganda is, and public, active imposition of homosexuality.”⁷³⁶ It is not clear whether the fact the two animals were male, or that they were of different species made the lawyer come to this conclusion, but his intervention was picked up by international media as an ironic follow-up to viral news about the tiger-goat zoo friendship.

This story of an alleged interspecies same-sex relationship is different than those I analyzed in this dissertation: the animals are of the same gender, but of different species, and the initial interest in the story was mostly driven by the fact that it was presented as an unexpected friendship between a predator and its prey. At the same time, these zoo reports share certain similarities, which highlight the stakes in introducing such animal stories, both for queer politics and zoo affairs. As much as the implausible romance between a tiger and a goat functioning as covert “gay propaganda” seems a ridiculous mockery of the other “queer zoo animal” cases I introduced here, it contains tropes worth examining. Firstly, how did a tiger-goat relationship mutate from being widely reported as “friendship” towards a supposed “homosexual bond”? Is it possible that the Russian lawyer who saw a “homosexual plot” in seemingly innocent zoo news is familiar with the thought of postmodern philosopher, Michel Foucault?

In an interview from 1981 for the *Gai Pied* magazine titled “Friendship as a Way of Life,” the French thinker argues for friendship as the basic queer mode of relationality: “The problem is not to discover in oneself the truth of one’s sex, but, rather, to use one’s sexuality henceforth to arrive at a multiplicity of relationships.”⁷³⁷ For him, those same-sex relations of “affection, tenderness, friendship, fidelity, camaraderie, and companionship”⁷³⁸ that develop outside of any institutionalized forms of relationship such as marriage, hold a potentiality for powerful political

“Lawyer Says That A Tiger & Goat Living In The Same Cage At A Zoo Are Promoting Gay Culture”; Shamanska, “Russian Lawyer Sees Illegal ‘Gay Propaganda’ In Tiger-Goat Friendship”; Chan, “Russian Lawyer Fears Tiger and Goat Union Could Turn Kids Gay.”

⁷³⁶ Luhn, “Russian Lawyer Accuses Unlikely Animal Chums of ‘Gay Propaganda.’”

⁷³⁷ Foucault, “Friendship as a Way of Life,” 135.

⁷³⁸ *Ibid.*, 136.

alliances cutting across age, status, and social activity. He later says: “I think that’s what makes homosexuality ‘disturbing’: the homosexual mode of life, much more than the sexual act itself. To imagine a sexual act that doesn’t conform to law or nature is not what disturbs people. But that individuals are beginning to love one another – there’s the problem.”⁷³⁹

With Foucault’s designation of friendship as the crucial and revolutionary component of homosexuality understood as a way of life, rather than an inborn quality or desire, the homophobic indignation caused by the goat-tiger co-habitation finally makes some sense. Was it the “interspecies mode of life” that provoked a homophobic reaction? Unlike other cases of queer zoo animals, not even courtship behavior was observed between Amur and Timur; they were simply sharing a zoo enclosure. Although this Russian lawyer’s complaints regarding two male zoo animals of different species “promoting homosexuality” might be a laughing matter, it sheds new light on the other cases of queer zoo animals that have been the focus of this dissertation. In fact, there is no need for a sexual act between two nonhuman animals to spin off a story of an animal homosexual relationship. The stories I analyzed are usually based on similar observations of co-habitation, courtship behavior, or ambiguous gender embodiment. Throughout my research, I often stumbled upon perplexing questions: did the penguins I write about “actually” engage in sexual intercourse? Does it make a difference if they did not? For each species, the sexual act might mean something completely different than for the other. How can one tell what kind of sex (same- or opposite-sex) spotted hyenas are having, given that they do not conform to gender binary? How are we to read giant pandas’ lack of interest in sex all together? Is the queerness or the straightness in nonhuman animals simply a matter of fiction? Can biological or ethological scientific explanations aid in answering these complex questions?

This leads to a crucial dilemma: if the interest in animal queerness resulting from the desire to solidify homosexual identity in the immutable idea of self-confining Nature is a product of history and as such is made thinkable due to specific conditions created by transformations in economy, social structure, and time organization, can one still speak of same-sex sexual acts among nonhuman animals in the language of biological factuality? Following Haraway, I see biology as a story-

⁷³⁹ Ibid., 136–37.

telling practice concerned with narrating the history of nature, and is thus based upon the procedure of sorting out *facts* from *fiction*. According to her, in this fabricated binary opposition facts are imagined as resulting from experience, belonging to the past, and thus, are made possible to evaluate as true or false, whereas fiction stems from a vision, holds an openness to the future, and is thus, fabricated, rather than discovered. She writes:

Fiction's kinship to facts is close, but they are not identical twins. Facts are opposed to opinion, to prejudice, but not to fiction. ... However, there is an important difference; the word *fiction* is an active form, referring to a present act of fashioning, while *fact* is a descendant of a past participle, a word form which masks the generative deed or performance. A fact seems done, unchangeable, fit only to be recorded; fiction seems always inventive, open to other possibilities, other fashionings of life. But in this opening lies the threat of merely feigning, of not telling the true form of things.⁷⁴⁰

Science is devoted to writing stories with good endings. And yet, acknowledging a tight bond between fact and fiction is not aimed at completely discrediting scientific knowledge production, but rather uncovers a generative potential in what Haraway defines through a multifaceted and purposely ambiguous signifier SF: science fiction, speculative fiction, science fantasy, speculative fabulations, and speculative futures.⁷⁴¹ Perhaps queer zoo animal stories are creatures of SF?

Stemming from that, the question is not whether it is a *fact* that Adélie penguins or African elephants engage in what in the human world would be designated as homosexual intercourse, or what one can learn from the multiplicity of animal sexual practices and gender forms. Rather, we might ask what kind of new modes of social imagination do these observations of animal queerness trigger? Following this line of thought, Elizabeth Wilson argues that biological science should not only serve as the object of feminist critique, but that social scientists ought to draw lessons from the data produced in natural sciences. For her, “scientific material contains schemes and wonders that are of immense significance for feminist theories of subjectivity, embodiment, and sexed and gendered identities.”⁷⁴² She also warns against glorifying animal queerness as simply resembling human behaviors, practices, desires, or social forms. To argue that sexuality and gender are strictly cultural phenomena would be not only limiting, but also entails imposing stabilization to the dynamic ontological drift between the multiplicity of natures and cultures that makes queerness into a multispecies phenomenon.

⁷⁴⁰ Haraway, *Primate Visions*, 4.

⁷⁴¹ *Ibid.*, 5.

⁷⁴² Wilson, “Biologically Inspired Feminism,” 284.

Wilson proposes to attend to both the diversity and the perversity of nonhuman forms of gender and sexual organization, “because it renders the human, cultural and social guises of queer less familiar and more captivated by natural and biological forces.”⁷⁴³ This trend to go beyond social constructionism in feminist critiques of science and to encompass biological materiality has been followed by other feminist scholars, especially within the field of new materialism.⁷⁴⁴ For example, Myra Hird attends to rich evidence for transness in a variety of nonhuman species, in order to challenge the culturally bound explanations of this phenomenon, and shift feminist philosophical debates on the authenticity of sex and gender. While she does so to dismantle transphobic claims on the artificiality of transgender embodiment, in a way similar to Wilson she advocates “to exercise caution when the behaviour of non-human living organisms is cited in the service of discussions of human socio-cultural relations.”⁷⁴⁵

What I add into this discussion through the analysis of my empirical material is a careful attention paid to the historical contingency of the interest in nonhuman queerness itself. Queer has always already been nonhuman (if not inhuman) in the ways it intersected with categories of race, class, gender, and ability. In Part 1 I traced the interest in nonhuman non-normative sexuality as already present in the early sexual liberation movement, and also parallel to the emergence of the zoo as a civic project. This contextualization is crucial to better attend to the political and theoretical possibilities that biological material offers for queerfeminist rethinking of the issues of subjectivity, identity, embodiment, and interspecies kinship, as well as for transgressing the myth of “timeless nature.”

For the fantasy of Nature as purely transcendent is very seductive. It seems easy to root identity categories in a timeless entity offering ontological stability. However, this naturalization entails serious political consequences. Consider a popular meme that proudly announces: “Homosexuality is found in over 450 species. Homophobia only in 1. Which one is natural?” This meme easily mutates into new versions, with the number of “homosexual species” steadily increasing. While I am sure this message, confirming the naturalness of homosexuality – and thus the

⁷⁴³ Ibid.

⁷⁴⁴ Hird, “Feminist Matters New Materialist Considerations of Sexual Difference.”

⁷⁴⁵ Hird, “Animal Transex,” March 1, 2006, 35.

naturalness of one's existence – provides comfort and a sense of stability for many within the queer community, nevertheless, I think that as political strategy it locks sexuality into a fixed category of belonging, and thus, flattens out the creative possibilities offered by non-normative relationalities developed beyond the constraints of identity politics. The sexological category of homosexuality needs to be abandoned to make way for a new kind of ethics.

Foucault notes: “It seems to me that a way of life can yield a culture and an ethics. To be ‘gay,’ I think, is not to identify with the psychological traits and the visible masks of the homosexual but to try to define and develop a way of life.”⁷⁴⁶ I see the attempts at hardwiring sexuality or gender through evidence from “the natural,” especially materialized through queer nonhuman animals, as a shortcut in a much more laborious process of deterritorializing identity categories and developing a way of multispecies life. As I have demonstrated throughout my analysis, civic institutions domesticating nature, such as the zoo, already specialized in providing natural evidence for heterosexuality. Therefore, if nonhuman animals can complicate the way we tend to think about humanness, sexuality, or queerness, they are allies in this new queer project. The task is to find a way of including nonhumans in the queer project without exploiting them as signifiers for human-imposed categorizations. To do so would simply mirror the classification practice that was foundational for both zoo captivity and for sexological categorical captivity.

That is why my cases of queer zoo animals analyzed in Part 2 were selected according to a broad definition of queerness, encompassing various positions within the sex/gender system. As an excerpt from a much larger compendium, this collection was not meant to be an exhaustive bestiary of queer creatures, but rather a continuum illustrating various modes of intersecting categories from gay penguins as the “origin species,” through spotted hyenas with their embodied transpecies intimacy, and ending with giant pandas with their fragile heterosexuality, carefully crafted alongside subtle racialization. With the notion of the *traffic in HumAnimals*, the itinerary of material-semiotic exchanges between these species and the categories they carry along with them becomes a guiding map for a project of undoing the hierarchies that group them. Moreover, in keeping the tensions between those promiscuous categories

⁷⁴⁶ Foucault, “Friendship as a Way of Life,” 138.

and by theorizing the traffic in HumAnimals as a dynamic system, I aimed at avoiding a classificatory approach that would again captivate these beasts in stable categories.

It is important to remember that queer zoo animals are uniquely political creatures. To follow their travels within the traffic means exploring different political contexts and submerging oneself into a polymorphic landscape of competing struggles, often revealing conflicting political agendas behind the representational use of animal queerness. Each case opened up a new world of tensions, multiple connections and complex entanglements. In this understanding, there are many more multispecies worlds to explore and untangle. My use of traffic in HumAnimals is concerned not only with guiding through these worlds, but also with sifting origins, delineating genealogies, tracking movements, and facilitating communication to expose the biopolitical underpinnings of the human/nonhuman union. In its theoretical pedigree, this traffic builds on Gayle Rubin's analysis of women's oppression not as rooted in biological difference, nor as "a reflex of economic sources,"⁷⁴⁷ but rather as a structure possible to dismantle by "recognizing the mutual interdependence of sexuality, economics, and politics."⁷⁴⁸ The term "traffic" connotes transaction, exchange, transport, export/import, transmission, translation, and distribution. These associations involve three types of conditions: dimensions (of distance and proximity) within which the traffic happens, the form of communication that allows it, and the value/changeability of the transfer that points to the economic registers of commerce, trade, or merchandise. Trafficking might also imply something illicit. In this way, traffic in HumAnimals is a power-loaded category, not devoid of inconvenient histories of colonialist trade, capitalist exploitation, and scientific appropriation that are inherent to the history of the zoo.

The first part of *Queer(ing) Naturecultures* is devoted to excavating the fossilized truths of normative sexuality and reproduction made visible through the institution of the zoo. The setting of the zoo matters. At times it was overwhelming to untangle the multiplicity of animal-human stories hidden behind a modern institution with such rich historical background combining scientific cultures, the pedagogical mission of the Enlightenment, and popular entertainment. I was particularly focused on those entanglements, which bind together such categories like gender, sexuality,

⁷⁴⁷ Rubin, "The Traffic in Women," 1975, 203.

⁷⁴⁸ Ibid., 210.

race, and class in a project of exhibiting nature. Through what I call *taxidermic taxonomies*, I reveal the heavy stitching holding these multiple stories together, ones owed to colonial expansion, nature exploitation, urbanization, the emergence and development of global capitalism, and modern national liberal ideologies. In this sense, by setting the historical and institutional background for contemporary stories of queer zoo animals, I weave together a critique of naturalizing subjectivities with a critique of the institution that facilitates this process. An overview of immense institutional reworking of the ideas behind exhibiting nature still renders zoos a fascinating, but problematic setting for a study. I think that zoos are obsolete, and I hope that together with rethinking biology as an open-ended queer project, human relationship towards the natural environment and other animals can also undergo a much-needed transformation.

Returning to the tiger-goat story, with which I opened this passage, I believe it inscribes well into the much-celebrated internet genre of cute, yet almost improbable interspecies friendships: a female dog breastfeeds orphaned kittens, a chicken plays with a domesticated fox, a husky dog befriends a wild bear, a dachshund visits a zoo lion. As with the statement about the number of homosexual species frequently shared by LGBT groups and organizations I mention earlier, this kind of light-content news is the new media equivalent of nineteenth- and early-twentieth-century amusing stories from the zoo: a giraffe ate a lady's flower hat, two monkeys dine at the table, a llama and a donkey plot a prison-break. Queer zoo animal stories also profit from this media coverage. However, as I pointed out earlier, it was the play behavior between the tiger and the goat that attracted much attention to them. It raises many questions: Was this somehow orchestrated to look like a play? Was the tiger just toying with its prey to eventually devour the goat? How did the goat know that the tiger approaches with an intention to play and not attack?

Exactly this topic concerns Brian Massumi in *What Animals Teach Us about Politics*.⁷⁴⁹ Drawing from Gregory Bateson's famous essay on play and evolution inspired by his visit to the San Francisco Zoo,⁷⁵⁰ Massumi argues that animal play is a performative form of metacommunication creating conditions for language – a

⁷⁴⁹ Massumi, *What Animals Teach Us about Politics*.

⁷⁵⁰ Bateson, "A Theory of Play and Fantasy."

seemingly foundational difference between human and nonhuman animals.⁷⁵¹ He is interested in the political dimension of this evolutionary take on play as reflexive, creative, sympathetic behavior revolving around the issue of *difference* (between combat and play, nipping and biting, game and hunt). Moreover, Massumi sees the confinement of the zoo in strict contradiction with the Batesonian definition of play, and rather as a framing for a rigidly human politics played out in that space via design, classification systems, food regimes, etc.⁷⁵²

However, what interests me most is his choice to build his theory of an animal politics based on play. He explains: “the basic reason it will not take sexual selection as its point of departure is that doing so leaves by the wayside the majority of life-forms populating the earth.”⁷⁵³ I do not agree that sexuality as a point of departure necessarily privileges “higher” animals. As evidenced by Hird’s foray into the world of prokaryotic cells and their colonies (including bacteria), their diversity, unique adaptability, and symbiotic tendencies redefine “microontologies” of sex.⁷⁵⁴ Nevertheless, all cases I have chosen for this thesis belong to what in zoo terminology is called “charismatic megafauna” – large species that can easily become symbols for nature conservation politics. Of course, it is not a coincidence that these kinds of large mammals (hyenas, pandas) and easily anthropomorphizable birds (penguins) serve as tokens for other kinds of political agendas, particularly sexual identity politics. Yet, I believe that in complicating well-settled notions of humanness, loosening the deadly grip of taxidermic taxonomies, and finding a way towards new multispecies ethics, this all-too-human representational practice needs to give way to even more unexpected alliances with hermaphroditic slugs, asexual bacteria, and other perverted creatures. The queer project of deterritorializing identities and forging undisciplined ecologies needs to take these less familiar creatures into account in order to render sex, gender, race, self, other, and queerness even less familiar or captivated. With my work I propose a significant expansion to the concept of queerness into the realm of nonhuman animals with the multiple ways they challenge heteronormativity and transform human understandings of sex. I hope that these strategies combined will allow for a slantwise paradigm shift in the joined project of queer(ing) naturecultures.

⁷⁵¹ Massumi, *What Animals Teach Us about Politics*, 8.

⁷⁵² *Ibid.*, 66.

⁷⁵³ *Ibid.*, 2.

⁷⁵⁴ Hird, *The Origins of Sociable Life*.

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