

DECOLONIZING EXTINCTION

Eight-year-old Lisbet was born in captivity at Lundu Wildlife Center in Sarawak on Borneo. Workers, officers, and volunteers alike commonly spoke of her as an orphan, but there was another story about her early life. The rumor was that when Lisbet was still an infant, her mother had been sent to a resort on a small man-made island in peninsular Malaysia to begin a rehabilitation program for semi-wild orangutans. The last time orangutans freely roamed the peninsula was during the Pleistocene.¹ Orangutans are otherwise only native to Sumatra and Borneo, islands where they found refuge during climate change millions of years ago and survived—unlike their conspecifics who died out on the peninsula and elsewhere in South-east Asia.²

The newly privatized branch of the state's forestry department surely welcomed the source of revenue Lisbet's mother would bring through the memorandum of understanding between the resort and the department. Privatization of the newly forged semigovernmental agency meant the same work as before, but with less money and fewer staff members. They were still responsible for the care of indigenous and endangered wildlife



MAP 1.1 Malaysia and Borneo in Southeast Asia. Map by James DeGrand.

in Sarawak, a semiautonomous state of Malaysia that is often treated as an internal colony. Lisbet lost her mother to the resort when she was still dependent on her. Yet the people involved felt that the resort could offer better conditions than the Forestry Corporation could. The fact that the resort could afford to keep a veterinarian on staff, for instance, while Lundu Wildlife Center could not, is one of the small ways that make up bigger ways in which colonialism is an ongoing process in Sarawak.

Eight-year-old Lisbet's world was populated with humans. When I first encountered her, she spent stretches of time in her enclosure standing erect on her limbs, so that her hand-like feet curled to support her entire weight. It was a feat considering how her body was adapted to living in trees rather than on the ground. For months, our encounters consisted of me jotting notes in her presence, either in the night house, where iron bars mediated our shared space, or outside, where I stood on a viewing platform two flights of stairs above her enclosure. Lisbet crossed these barriers and made our shared interface more eventful by throwing projectiles at me. Once it was a watermelon rind, other times stones, or her spit. Her eyes would arrest my gaze during such moments. Our social relation was subtle yet significant, at least for me. Orangutans have the reputation of being the most solitary of all the great apes. But the orangutans held at Lundu Wildlife Center, like Lisbet, are neither wild nor tame. The center aspires to teach these orangutans to become semi-wild.³

Lisbet's initial experiences outside of captivity occurred in our first week of meeting, and it appeared she was going to fail rehabilitation. Her keepers took her deep into the 22-km² forest that surrounded the wildlife center and immersed her in a verdant expanse. Yet Lisbet did not climb a single tree. Instead, she stayed on the ground with the group of men trying to train her.

Layang, one of these men, explained to me what would happen if Lisbet failed rehabilitation. If she were unable to demonstrate such skills as tree climbing or nest building, she would be assigned to the captive breeding program. Once sexually mature at about fourteen years old, she would be temporarily confined with a male orangutan for the purpose of impregnation. Such confinement does not take "female choice" into account. A few months after birth, the infant would be taken away, even though orangutan infants usually stay with their mothers for about seven years, learning how to survive (Galdikas and Wood 1990). Keepers like Layang doubted that a mother whose life has been spent in captivity would be able to teach her infant how to live. It is precisely for this reason that they would then take the infant away from her because they figured they would have a better chance at training the infant in jungle skills than the orangutan's mother.⁴

This is what the future would hold if Lisbet were deemed unable to be rehabilitated. Layang did not want that to happen. He knew the violence Lena experienced in the week she was confined with Efran.⁵ That horror was for naught since both Lena and her baby died shortly after Lena gave birth. Layang felt it was worth the shared effort of bringing Lisbet 10 km into the forest, even if someone had to carry her piggyback, and even if she weighed nearly as much as Layang.

Inspired by the burdens Layang and his coworkers endured, my intention in this book is to urge reflection: What if we experienced this present era of extinction without violent domination and colonization over others, particularly nonhuman beings? Can we instead embrace the vulnerability of sharing our lives together, however fleeting those moments might be? Can we abandon an impression of safety that depends on cruelty? In other words, how might we decolonize extinction?⁶

To become semi-wild meant achieving the goal of becoming *bebas*, or the freedom of unrestrained license. This is not the freedom of the post-colonial nation-state, officially celebrated as national holidays (*merdeka* in Malay) (Steedly 2013). Nor is it the freedom of movement espoused in the

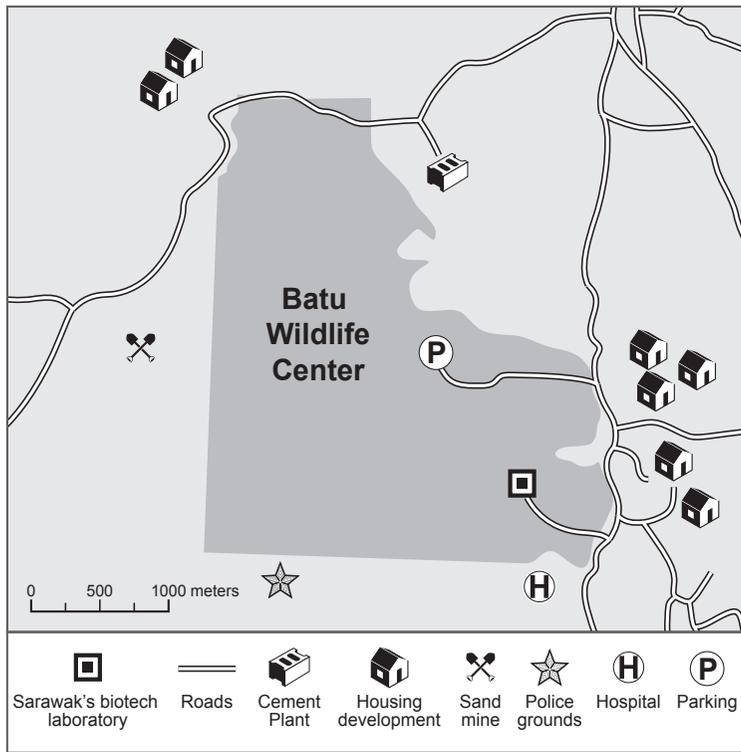
philosophy of liberalism, where such freedom is limited to the rights of fully fledged citizens (Khalili 2013). Neither is it the libertine's freedom of wild parties, wild nightlife, and wild animals (*liar* in Malay). Bebas is the freedom of acquittal, the independence of factory women unyoking from their fathers' orders (Ong 1987), and the liberation of youth in Indonesia and peninsular Malaysia (Ibrahim 2018; Idrus 2016; Lee 2016). This kind of freedom has no directive goal or a priori destination—or, if it does, it is open to possibilities, uncertainties, and experimentations. As I will show in this work, the sense of liberation and independence in bebas offers a theory of decolonization.

Teaching Lisbet was not an act of domination, and any animal keeper would agree.⁷ Working with semi-wild orangutans entailed taking personal risk and experiencing physical vulnerability.⁸ Thorny durians that can make humans bleed are one of their favorite foods (Reddy 2012). Their teeth are well suited for chewing bark off trees. Already Lisbet was strong enough to inflict pain by biting flesh, something that semi-wild orangutans are apt to do. Unlike wild orangutans, who try to keep their distance from people, semi-wild orangutans are habituated to people and do not fear them.

Layang felt the risk was worth it. In his opinion, risk, vulnerability, and interest were essential characteristics of the work of care in orangutan rehabilitation.⁹ A simple need for a job would be insufficient motivation for this kind of work. Construction jobs or overseas logging and oil rigging work could readily be had. Those other jobs might very well require degrees of risk and vulnerability, but working at the wildlife center meant fostering new and extraordinary kinds of social relations, relations at the very interface of the serious threat of a species's annihilation.¹⁰

Looking at Sarawak's two wildlife centers hosting semi-wild orangutans, we see how colonial legacies and postcolonial institutions impact the way orangutans live and die. Batu Wildlife Center is situated in a state nature reserve that is 6.5 km². When a master's student conducted research there in 1995, it was 15 km² (Chow 1996). The normal range for an individual female orangutan is 7 km² (Galdikas 1988). This area is meant to accommodate an ever-growing population of orangutans: twenty-six as of 2010.¹¹

The reserve is on the edge of the capital city. To the west, sand excavation by the state's largest development firm, Global Limited, cleared the forest on the other side of the boundary.¹² The sand that was extracted from this site was used to build a world-class airport that could better facilitate in-



MAP 1.2 Batu Wildlife Center. Map by James DeGrand.

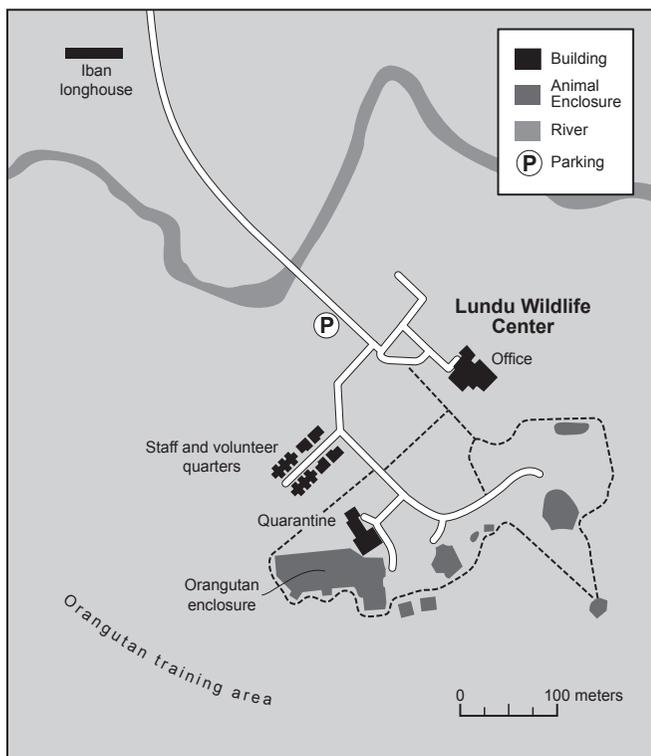
ternational and regional commerce, including tourism.¹³ To the northwest, simple Malay, Chinese, and Melanau homes and gardens push along the wire fencing of the reserve boundaries. At the northeast boundary, trucks come in and out of a cement factory. To the east, gated housing developments with names like “Borneo Gardens” have sprouted along both sides of the road. Toward the southwest is the police training academy, where practice gunshots in quick succession are heard regularly. To the south lies a hospital. The park manager has repeatedly complained about the pollution caused by the health facility: discarded syringes float by on the creek weaving its way through the nature reserve and out by the simple homes northwest of the site where people fish.

However, when visitors from abroad stand in the middle of the center’s courtyard, all they seem to see is forest. As one German visitor said, with awe in her voice, “Is all of Sarawak like this?” Her guide didn’t understand her, so she elaborated, “With so many trees?”

In 1997, Lundu Wildlife Center opened on the grounds of a national forest in order to house Batu Wildlife Center's population beyond the latter's carrying capacity. The Land and Survey Department of the state classified the map of the area surrounding Lundu Wildlife Center because of the high risk of illegal logging. The newer site was modeled on Australian zoos. Since the Forestry Department's partial privatization, both Batu and Lundu Wildlife Centers operate as private-public partnerships run by a "semigovernmental" agency known as the Forestry Corporation.¹⁴ The site hosts commercial volunteers, mostly British women, who pay thousands of American dollars per week to perform hard labor that supports Layang and others' work of care in orangutan rehabilitation.

In the institutions created by past colonial regimes and continued by a postcolonial state, we see a theory of decolonization generating in the everyday but extraordinary work of care that happens here in Sarawak's two wildlife centers. To see the work of Layang with Lisbet is to see the experimental work of decolonization in present-day postcolonial Sarawak. It is to realize the possibilities carried by the word *bebas*. The work of care in orangutan rehabilitation, I suggest, is an effort at decolonizing extinction. Care is not necessarily affection, but for me it is a concern about the treatment and welfare of others. This takes work; it takes labor that requires compensation.¹⁵

Decolonization is not a past era of the mid-twentieth century, ushered in by anticolonial "mimic men" of the postcolony (Bhabha 1994; Mbembe 2001; Wilder 2015).¹⁶ Rather, decolonization is an ongoing process in Sarawak that simultaneously experiences an ongoing colonialism. The stakes of decolonization are not limited to issues of sovereignty, occupation, or knowledge production—all of which are contemporary struggles in decolonization and in continued colonialism more broadly (Allen and Jobson 2016; Fanon 1965; Harrison 1991; Smith 1999; TallBear 2013). Instead, decolonization scratches at fundamental ways of understanding the world.¹⁷ Taking decolonization seriously would entail not just questioning who manages Sarawak's ecologies and how they manage them, as political ecologists have long pushed us to consider (Brosius 1999; Cooke 2006; Dove 2011; Dove et al. 2005; Padoch 1982; Padoch and Peluso 1996; Peluso 1991; Peluso and Lund 2011; West 2006). It also entails questioning deep-seated assumptions about life and ecology: who is living, in what ways are we in



MAP 1.3 Lundu Wildlife Center. Map by James DeGrand.

relation with them, what constitutes selves in these relations, and to what obligations are we committed (de la Cadena 2010; Kohn 2013)?¹⁸

Even as decolonization demands a serious challenge to the so-called great divides between human and animal or inanimate, it also demands a rejection of a telos (Haraway 1991; Latour 1993).¹⁹ To decolonize extinction is to resist definitively saying what should be or ought to be.²⁰ Indeed, what might look like liberation, such as the free mobility of orangutans within the constraints of a wildlife center, may on a deeper level be less liberatory than it seems. Yet what makes such an action a potential form of decolonization is its experimentation in how to relate to others beyond tired colonial tropes of violence and benevolence.²¹

To seriously consider the impact of our actions on those nearly at the brink of extinction, we need to think about what other ways things might

be done, especially when we take the perspectives of orangutans and workers into account. I suggest that decolonization is to be oriented toward process and experimentation and not toward a foregone conclusion, except for the need to care enough about others, including and in particular nonhuman others.²² Decolonizing extinction requires a serious reconsideration of the current norms and practices around how we share this planet.

The stories I share in this book occur over four timescales. First, they are about affective encounters that happen over seconds and microseconds. This is felt between all kinds of earthly bodies. Second, these occur between different kinds of individuals, whether human or otherwise, each carrying life histories that span years and decades. This is the scale at which we tend to feel space, place, and memory (Feld and Basso 1996; Rosaldo 1980). Third, the connections taking place here must be understood in the *longue durée* that entails a consideration of multiple centuries of trade, mobility, and colonialism (Braudel 1958). We sense this on the spatial scale of oceans and seas (Gilroy 1993; Ho 2006; McDow 2018; Sharpe 2016; Spyer 2000; Subramanian 2009). And fourth, extinction has us thinking about the epochal time of thousands and millions of years, in which time is marked by death on a mass scale. Such a divine perspective is impossible for humans to experience directly, and we can barely touch on it in fossilized form (Haraway 1988; Shryock et al. 2011). It is only apparent to us through the detritus of material bodies that comprise the layers of geologic time (Andrews 2008).²³

Thinking through these multitudes of timescales simultaneously, we can start to imagine that a single timescale alone is insufficient for understanding the fleeting intimacies that cross many kinds of difference and that happen at such sites as Lundu Wildlife Center. Most importantly, grasping these layers of time frames together points to contingency. By contingency, I mean this: things have not always been the way they are and thus do not have to be this way in the future.

The contingency of our present circumstances frames the central question that guides this book: How are we to live and die in this present age of extinction, when colonial legacies help determine who and what is in better position to survive? Layang, the wildlife ranger Nadim, and the junior officer Cindy offer inspiration for how we can think about and live with the relations that make up the planet as we know it.

Extinction in this book is not a muse for a eulogy about creatures that one nostalgically misses even while actively killing them (Choy 2011; Heise

2016; Rosaldo 1989). If we were to take on an earthbound perspective of multiscalar time, we would see that extinction, like individual death, is a condition of planetary living. Decolonizing extinction is not an attempt to try to stop it. Rather, the question and challenge of decolonizing extinction is its experimentation with other responses and other senses of responsibility than what usually inspires us when we want to do something—anything—to stop what might be inevitable. The challenge of decolonizing extinction, then, is not to end extinction, but to consider how else might it unfold for those who will perish and for those who will survive.

Decolonization appears to be emerging from a frustration with our current moment, whether we call that moment late capitalism, late liberalism, or the Anthropocene. Such terms cut across temporal scales and seem disconnected, but they are indeed inextricably connected. Critical questions such as which bodies—land, human, and otherwise—bear the toxins of industries indict environmental racism and ongoing colonialism, especially settler colonialism and its subtle and not-so-subtle forms of genocide (Bohme 2015; Goeman and Denetdale 2009; Haraway 2016; Murphy 2016). Decolonization emphasizes the politics underlying the ontological turn, which has been accused of being apolitical (Bessire and Bond 2014; Kohn 2013).

Some criticize the emergence of decolonization in scholarship on the grounds that leftist and progressive scholars are simply using the term as a synonym for social justice at large. Doing so loses its specificity and erases its political possibilities, as Eve Tuck and Wayne Yang (2012) argue.²⁴ In other instances, decolonization gets folded into decoloniality, which cannot be done without abusing the past.²⁵ While decolonial scholars like Maria Lugones (2010) offer a means to recognize nonhuman others as colonized subjects, decolonial efforts to center colonial exploitation beginning in 1492 and the subsequent sixteenth century ultimately work as a modified world systems theory (Mignolo 2015; Quijano 1995; Wallerstein 1974).²⁶ To consider world systems theory at this moment, whether called as such or by a new name, suggests that colonialism is singular and far more totalizing and absolute in its power.²⁷ If we were to accept the hegemony and totality of colonialism, we could not sufficiently consider the possibilities for how things might be otherwise.²⁸

My hope is that stories from Sarawak can inspire our aspirations elsewhere for an otherwise, one that does not impose isolation, firmly bounded categories, nor exclusionary nativism, but instead invites a recognition of

interdependencies across kinds and differences (Cattelino 2008; Kauanui 2008). The aspiration of decolonization that I perceived in Sarawakians' work of care for Sarawak's wildlife differs from decolonization based on autochthony (Geschiere 2009). Indigeneity in Sarawak, with its more than thirty indigenous ethnic groups, rejects *Blut und Boden*, a German idiom of ethnic nationalism that has resonated in various historical eras and all too easily has led to genocide, ethnic violence, partition, political misrecognition, and forced exile (Mamdani 1996, 2001; Tamarkin 2011). Rather, indigeneity in Sarawak is based on centuries and millennia of migration, both within Borneo and across seas. When we consider deep history and epochal time, we see that indigeneity in Borneo is about mobility and refuge.²⁹

This book is not a story of settler colonialism and the ways it kills and dies. It is instead a story of both extractive and internal colonialism generating relations, enclosures, and futures.³⁰ It is also a story of finding refuge: Ibans migrating within Borneo and in Sarawak to gain a living, orangutans who found refuge from climate change that occurred millions of years ago, and their contemporary descendants who now find refuge in the outskirts of the city of Kuching (Arora et al. 2010).³¹ It is also a story of colonization, such as the Sarawakian bacterium *Burkholderia pseudomallei* that I describe later in this book (Podin et al. 2014). The microbe uniquely evolved in Sarawak to live in Sarawakian soil and feed off Sarawakian plants and animals. It is also a story of decolonization, of the work of challenging the impetus for extraction that impacts the orangutans, plants, and people of Sarawak. And, last but not least, it is a story about the politics of extinction, one that is feminist in its commitment to understanding how gender, sexuality, and social inequalities shape how we live through and respond to the threat of species loss, and one that is critical of the colonial legacies that underlie our relations with nonhuman others. When we look at relations in different kinds of timescales and in different and unexpected kinds of spatial formations, we can get a perspective that shows how things that seem so entrenched may not be as permanent or indefinite as they seem.

EXTINCTION

Mass extinctions mark the transition of epochs. Extinction, along with the fluke of mutation, generates coevolution (Cassidy and Mullin 2007; Sodikoff 2012). Earth at the end of the Cretaceous Period 66 million years

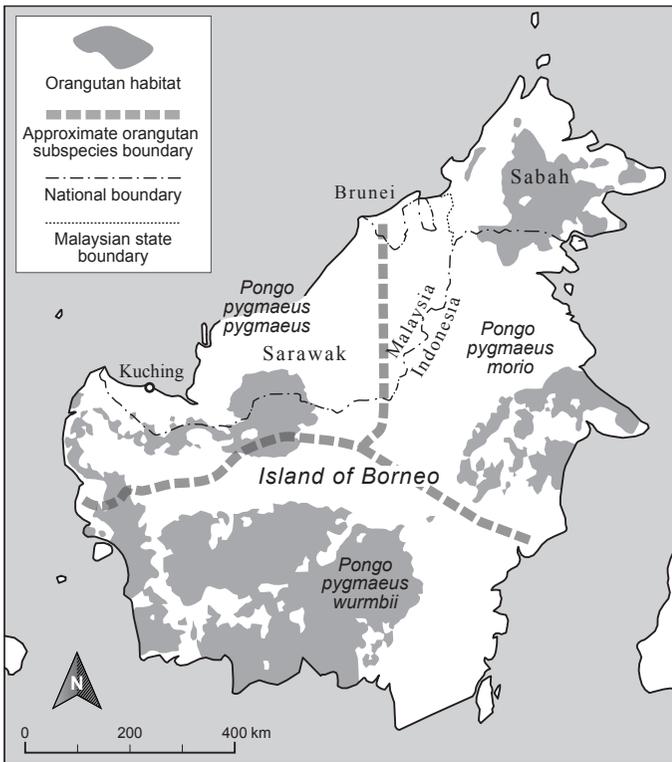
ago witnessed around 93 percent of terrestrial species dying out (Longrich et al. 2016). They appear in the sediments of rock as traces of lives lost long ago. Recovery is thought to have been fast in geologic time, at 300,000 years (Longrich et al. 2016).

A timescale in which more than a quarter million of years means speedy recovery forces us to recognize that our lives are short, that our moments together are always fleeting. From such a vantage point, we get the sense that we bodily forms have significant impacts on each other until the shells of our mutual existence eventually get embedded in layers of earth. Such a theory of evolution is attached to the rock of this planet and raises the question: How shall we each make our mark?

The Cretaceous–Tertiary extinction event is one of six periods of mass extinction in Earth’s history. In the time since then, Borneo has become a “biodiversity hotspot” of mythic proportion and a native habitat for an array of endangered species like the three subspecies of Bornean orangutan (Mittermeier et al. 1998; Myers and Mittermeier 2000). In the ecological turmoil of the Pleistocene three million years ago, orangutans found refuge from fluctuating ice ages (Arora et al. 2010).³² Borneo, site of the world’s oldest rain forest, continues to foster the coevolution of new life forms.

As many of us already know, we are currently in another moment of extinction. Asteroids, volcanoes, or meteors did not begin this current wave of destruction. The sixth extinction marks the end of the Holocene and the beginning of the Anthropocene. The current wave of extinction is thought to be pushed by the homogenization of flora and fauna, the high proportion of biomass consumed and then wasted by humans, the heavy hand humans have exercised on certain domesticated animals, and the technosphere of roads, power plants, and the taken-for-granted comforts of modernity (Williams et al. 2015). Picture for a moment rows of mono-crops, cattle feed lots with waste runoff, and the trucks and cars on the highway passing them all by: that is what extinction looks like. A quarter of mammals on Earth are threatened, endangered, or critically endangered. Orangutans are one of many that are now fewer than ever before.

The extinction of our epoch bears a moral weight. The response to mass extinction has not been to curb the burning of fossil fuels or to cease the standardization of species in industrial agriculture.³³ However, one acute response has been to directly intervene in the lives of endangered species. The moral weight of extinction is significant enough to generate an indus-



MAP 1.4 Bornean Orangutan Subspecies Population Distribution. Map by James DeGrand, based on data from Wich and Kuehl (2016) and the *IUCN Red List of Threatened Species*, <http://www.iucnredlist.org>, downloaded on May 21, 2017.

try of volunteer tourism for threatened wildlife. Individuals with the financial resources to participate in commercial volunteerism can personally feel part of a greater mission. The “mission” in which they engage is secular. Commercial volunteerism for endangered wildlife lacks the language of religious ideology in its goals or motivations. Commercial volunteers come to Lundu Wildlife Center not for salvation, but motivated by a professed interest in animals and conservation.

When describing the plight of orangutans—and all orangutan subspecies are now critically endangered as of 2016—primatologists and conservationists sometimes emphasize that habitat loss has an extreme impact on orangutans because of their long birth intervals and low reproduction rates (Cawthon Lang 2005). In other words, the blame for extinction falls

partially on sexual reproduction. Thus female orangutans in particular bear the burden of their survival as a species. We get a hint of this when we consider the designation of “captive for breeding purposes.” A similar hint appeared when a former CEO of the Forestry Corporation boastfully and impossibly promised that the state of Sarawak would target an increase in the population of orangutans to nearly double its present size (Chan 2009).

The International Union for Conservation of Nature serves as the authority on extinction, and they periodically assess the status of endangered species. Their 2016 assessment, published as part of their continuously updated Red List of Threatened Species, explains that the blame for orangutans’ status as critically endangered lies in two factors: the destruction, degradation, and fragmentation of their habitats and hunting. The argument that hunting is a noteworthy cause of extinction relies on a quantitative survey (Meijaard et al. 2011). That study found that cases in which people killed orangutans had stemmed from conflicts that arose when orangutans raided farmers’ crops.³⁴ While the study shows that crop raiding by orangutans was more common at sites that were surrounded by monocultural industrial agriculture, particularly palm oil, rice, pulp, and paper plantations, the blame is nevertheless attributed to peasants’ hunting practices instead of agricultural industrialization (Voight et al. 2018).

When scientists feel that the conservation of orangutans lies in the hands of powerful “decision makers” and not the people who directly interface with the species in question, then indigenous hunters of Borneo and female orangutans slow to get pregnant become easy scapegoats for the problem of extinction (Meijaard et al. 2012; Wich and Kuehl 2016). My work in these pages offers an alternative view by highlighting the perspectives and experiences of those who are often blamed for orangutan extinction: displaced female orangutans and the people on the ground who work with them, including displaced indigenous people.

The workers coming from the Iban longhouse outside Lundu Wildlife Center are displaced. The orangutans Ching and Ti hail from Batang Ai, the very place from which the caretaker and *Tuai Rumah* (Iban longhouse headman) Apai Julai came. It is not a coincidence, since Batang Ai then was the site of a large hydroelectric dam construction project that affected a water catchment of more than 1,200 km² (Cramb 1979; King 1986; Sarawak Museum 1979). This and other examples show that both wildlife and

people in Sarawak are subject to ecological loss, and such loss creates new social relations across species.

When viewing human–orangutan relations with four simultaneous time scales, we look to the future as well as the past. Over hundreds, thousands, and millions of years, we get glimpses of adaptation and resilience. When we think of the future, can we do so without a response to mass death that depends on sexual reproduction and the rearing of younger generations? Can we expand our imaginations to envision other ways of living and dying at the temporal and spatial brink of extinction?³⁵ Can we, like the wildlife ranger Nadim, make serious efforts to “think what the orangutan are thinking”?

ORANGUTANS

Tourists come to Sarawak’s wildlife centers explicitly to encounter orangutans. When they do, they encounter a variety of other inhabitants, including endemic trees, flowering plants, squirrels, and bats. Visitors originally fixated on orangutans find themselves captivated by other species, such as gibbons, sun bears, macaques, and binturong. These wildlife centers stress particular interest in orangutans, and in doing so they suggest a hierarchy of species, which I personally find difficult to espouse. My purpose here is not to argue that orangutans should take priority over other life forms. I want to think about the relations that develop between orangutans and the people who care for them as examples of how we inhabit this planet with others in the current age of extinction.

We cannot know with certainty an orangutan’s perspective. Even if we were able to follow the synapses of orangutans’ neurons, we still wouldn’t know what it *feels* like to be an orangutan. A sense of who an orangutan is or what she might become is limited to signs conveyed by their bodies. Some of these signs may not even be perceivable to you or me. We could turn to different kinds of experts to help us piece together what orangutan perspectives might be.

A behavioral ecologist might tell you that orangutans are known as the least social of all hominids, which is not the same as thing lacking social relations. Birth intervals among orangutans are the longest of all the great apes, with a seven- to eight-year gap the typical average between pregnancies (Galdikas and Wood 1990; Kuze et al. 2008). Their lives are semi-

solitary: they tend to live and travel independently if they are not part of a mother–infant dyad, a temporary group of juvenile males, or a temporary coupling.

A conservationist, on the other hand, will likely tell you that orangutans, like other great apes, can be divided into wild, captive, and rehabilitant populations. Wild populations of orangutans, a conservationist will privately admit, are the most important. They are the ones who live in biodiverse habitats. They are the ones who serve as a “flagship species,” with efforts toward their preservation saving large swaths of forest, and with it other, less charismatic creatures (Barua 2011; Root-Bernstein et al. 2013). They are the ones whose behaviors are more unknown and thus more interesting.

Captive populations of orangutans are now mostly zoo animals, since bans on the use of apes in medical research began across the world in the early 2000s (Knight 2008; Nihon Kankyō Kaigi 2009). When survival in the wild is tenuous, captivity potentially becomes the sole means of survival for a species (Braverman 2015). Yet “extinct in the wild,” an official designation by the International Union for Conservation of Nature, is a mere step before flat-out “extinct.”

For our hypothetical conservationist, rehabilitation poses a problem. Rehabilitation centers give sanctuary to displaced apes who were often caught in illegal trafficking and taken into custody by the state. Some conservationists criticize sanctuaries for promoting genetic admixture, at times across subspecies, which is a problem for those who value gene pools with diversity (Goossens et al. 2009). Rehabilitant orangutans have been exposed to human contact and anthroponotic illnesses, which endanger wild populations. This is why primatologist Herman Rijkssen abandoned rehabilitation in the 1970s. Rehabilitation is also considered more expensive than other conservation operations when dollar figures are calculated per individual ape (Meijaard et al. 2012).

Great ape rehabilitation centers are tourist sites, and although nearly every facility in the world has explicit recommendations about the proper distance to protect against respiratory illness, tourists nevertheless often show up at these sites with symptoms of illnesses that can harm the very endangered apes they came from afar to see (Muehlenbein et al. 2010). It should not surprise anyone that rehabilitation centers have high infant mortality rates, higher than either wild or captive populations (Kuze et al. 2012).

These different primatological perspectives can help us get a sense of what

a pubescent, twelve-year old female orangutan might feel as the yearning for solitude in the midst of a group of twenty-six others packed into a forest that would accommodate only one orangutan in the wild. Yet privileging a primatologist's perspective over all others limits our imagination to those with technoscientific expertise (Haraway 1988). Adding more perspectives widens our scope and offers vantage points we may not have had the sense to notice.

Scholars of human–animal studies use stories and experiences to evoke feelings that are actively suppressed in most other contemporaneous science writing. Think of the loving human hands laid on reputedly bright laboratory rats (Despret 2004), the encouragement whispered to fighting crickets (Raffles 2010), or the frustration of Indonesian primatologists struggling and failing to have a Sulawesi macaque recognized as a distinct species (Lowe 2006). Multispecies ethnographers in particular value embodied ways of knowing (Dave 2014; Govindrajana 2015; Hayward 2010; Parreñas 2012, 2016; Solomon 2016; van Dooren 2014; Weaver 2013).

In the late twentieth and early twenty-first centuries, animals have become safe and apolitical subjects in the way that weather and road conditions used to function in polite conversation in the nineteenth and twentieth centuries. Today, cute cat videos supplant dismal news on smartphones, and National Geographic TV shows have long filled the repressive airwaves of Malaysian state television (Chua 2017; Ngai 2012).

But the animals in this multispecies ethnography are neither polite nor apolitical. They urinate, defecate, and earn their food like the workers caring for them. For the orangutans I describe, extinction threatens the existence of their species, and their extinction will not be the result of their own failures, actions, or inactions.

The emergence of multispecies ethnography means that multispecies ethnographers often stop at the point of wonder that cross-species relations generate in the space of difference, diversity, and multiplicities (Alger and Alger 1999; Candea 2010; Kirksey and Helmreich 2010). Often, such ethnographies incorporate the vantage point of scientists or conservationists, and in so doing privilege the perspective of those with the means to embrace an environmental cosmopolitanism by traveling the world (Braverman 2015; Lorimer 2015; Van Dooren 2014). My perspective approaches multispecies ethnography from a different angle, through its emphasis on geographic specificity and what that entails by way of history, culture, sociality, and ecology, even when that specificity might lead to an emphasis of

one species over others. Happy, saccharine stories of multispecies friendship and flourishing are inadequate (Ahuja 2016; Fiskesjö 2017; Freccero 2011; Porter 2013; Tuan 1979). Nor can we be satisfied with stories of human–animal conflict and interspecies competition when our very lives are made possible through symbiosis and coevolution (Haraway 2014, 2016; Mansfield et al. 2014; Subramaniam 2014; Tsing 2005, 2015). We need richer stories that suit the complexity of our times and of our lives.³⁶

Ponder, for instance, encounters with semi-wild orangutans. Such encounters are always uncertain. They can lead to an embrace, or to a bloody bite and subsequent infection. They can lead to feeling saliva upon one's body when at the receiving end of an orangutan's raspberry. They can involve the physical impact of a shower of tree branches, the fall of dead leaves like confetti, or to mere avoidance and disinterest. In such encounters, we lose the ability to derive meaning from referential speech. We sense an uncertainty that unfolds from feelings and visual cues generated in the space between bodies—all kinds of bodies, whether animate or inanimate, lively or otherwise. It is here in this relation between humans and semi-wild orangutans that a distinction between affect and emotion makes sense: the shaky sensations wavering between potential joy and potential worry are not merely embodied emotions, for this is where we feel the affective rush of sensation that stirs not from within the body, but between bodies, in the moments before they become emotion, if they become anything at all.³⁷ This happens on the timescale of seconds and microseconds. It happens with any and all encounters between bodies, but especially in the space of orangutan rehabilitation.

Take, for instance, encounters with the adult female orangutan Ching, who had a reputation for biting local women. Any encounter with Ching was unpredictable. Perhaps the reasons lay deep in Ching's only partially known life history (Braitman 2014). Ching was surrendered to the state's Forestry Department more than a decade ago as a young orphan; she had for years served as an attraction at a luxury hotel in Barang Ai overlooking the man-made lake that had submerged her forest habitat. She had a reputation for disliking women, especially local women, enough to hurt them. Some alleged this stemmed from when a Chinese woman visited the park and refused to give Ching her backpack containing sweets. Others thought it was connected to an incident in 2004 when an intern from a local university teased the captive Ching after her first infant born on site was taken

from her. The intern supposedly held the baby and showed her to Ching while Ching was behind bars.³⁸

As a Filipina American, I was technically foreign, but often mistaken to be local by Sarawakians. To Ching, my appearance made me vulnerable to attack. This particular orangutan had the power to make me feel reduced to an essentialized subject-positioning, cuing culturally informed ideas of gender and race.³⁹ The junior officers Cindy and Lin were also vulnerable to her attack.⁴⁰ We each responded to that added risk and responsibility differently, as I show in chapter 1. Orangutan bites often require hospitalization. I conducted myself with trepidation whenever I was in her presence.

The International Union for Conservation of Nature issues Best Practices Guidelines for the Re-Introduction of Great Apes as an “ideal code of conduct,” unencumbered by the limitations of “location, resources, and government regulations” (Beck et al. 2007: 3). The guidelines define rehabilitation as a temporary condition: “the process by which captive great apes are treated for medical and physical disabilities until they regain health, are helped to acquire natural social and ecological skills, and are weaned from human contact and dependence, such that they can survive independently (or with greater independence) in the wild” (Beck et al. 2007: 5). This definition of rehabilitation is aspirational, just like the guidelines in which it appears: orangutans here cannot be “weaned from human contact.” Lisbet is in the second generation of orangutans at Lundu Wildlife Center, while three generations live at Batu Wildlife Center.

The technical term in the primatological literature for Lisbet and her kind is *rehabilitant orangutan*, but they are more accurately described by Layang, Nadim, and their coworkers as *semi-wild*.⁴¹ Semi-wild is a more honest term when release to the wild is uncertain, when sanctuaries are as permanent as poured concrete. Reflecting this reality since privatization, Batu and Lundu are no longer officially named “orangutan rehabilitation centers,” but “wildlife centers.”

Working at the wildlife center demands an ability to read orangutans not only by discerning individual faces, but by becoming sensitive to such subtler signs as raised hair or how they move their lips. Miscommunication with apes or nearly any other resident of Lundu Wildlife Center could easily lead to painful and bloody bites. Every worker tasked with the day-to-day work of feeding semi-wild orangutans swore that bites are inevitable. Like Ching, some orangutans were repeat instigators of such physical contact.

The potential threat of injury characterizes the work of caring for semi-wild orangutans because there are no physical barriers between apes and people. This contrasts with modern zoos, where experiences with animals take place in a controlled environment and are mediated through the hindrances of iron bars, Plexiglas, or man-made moats. Such barriers define the experience of contemporary zoos throughout the world, whether in Singapore, San Diego, or Sydney. The wildlife center that hosts semi-wild orangutans is different from any other site in the world, as it allows for the layperson's direct and embodied experience of what it is to be at the interface of species loss and vulnerability.⁴² In a material way, the orangutan rehabilitation center teaches us how to share a future together amid mass annihilation.⁴³

ORANG HUTAN

Consider the word *orangutan*. Orangutan is often translated as “Man of the Forest,” based on the Malay terms *orang* (person) and *hutan* (forest). It comes to English by way of the Dutch physician Jacobus Bontius, who was employed by the Dutch East Indies Company. He offered the first European account of orangutans in the 1600s. On Java, in present-day Indonesia, far from the forests in which orangutans live, Bontius had heard that orangutans are capable of speech but refuse to speak in order to avoid being put to work (Bontius [1642] 1931; Cribb et al. 2014). This has haunting significance insofar that this was in Batavia, when it was an entrepôt of the Dutch slave trade (Baay 2015; van Rossum 2015).⁴⁴

One better versed in Southeast Asia history or philology will tell you that the word *orangutan* was not the colloquial term for people living in orangutan habitats. The famed explorer Alfred Russel Wallace ([1869] 1890) reported that *maias* was the preferred term in Sarawak in the 1850s. It sounded like *mawas*, the common term used on the northern area of the island of Sumatra, across the Karimata Strait (Payne and Prudente 2008). These terms are likely cognates. Contemporary conservationists Junaidi Payne and J. Cede Prudente (2008) note that Sarawakians historically made three distinctions among orangutans: *maias kesa* (or small orangutans or juveniles), *maias rambai* (or medium-sized orangutans, presumably females and subadult males), and *maias timbau* or *maias papan* (or large and flanged adult males).⁴⁵ As late as the 1950s, the curator of Sarawak Museum Tom

Harrison organized the *Maias* Commission to consider the ape's conservation status. Since then, the term *maias* has faded out of everyday speech in Sarawak and orangutan has taken its place. People working at either of Sarawak's two orangutan rehabilitation centers were unfamiliar with the word *maias*. The translation of orangutan as "person of the forest" or "man of the forest" bears only recent significance for Malay speakers at best.

If we take the history of language into account, we see that the idea of shared humanity through the audial affinity between orangutan and orang likely has its origin in a misunderstanding between a sixteenth-century Dutchman and the Javanese traders with whom he spoke. Understanding the relations that I describe in this book does not require a perspective that centers humanity, such as a Dutch Calvinist vision of animals as degenerate immoral products of the sinful and "detestable" desire of "women of the Indies."⁴⁶ Indeed, evolution is irrelevant for how Sarawakian people relate to Sarawakian wildlife. Even without a claim to a shared "family of man"—11 million years have passed since humans shared a common ancestor with orangutans—Sarawakian people and orangutans already share experiences of displacement and arrested autonomy.⁴⁷

DECOLONIZATION

Decolonization, as an idea, aspiration, or set of actions, requires a double vision. On the one hand, it requires focusing on the specific contingencies of history, place, and politics. On the other hand, it calls for a comparative view with other forms of decolonization.⁴⁸ How might ongoing and future decolonization matter for orangutans in a place where decolonization is usually discussed in the past tense and where independence happened for less than two months, in 1963? This question requires thinking about specific space and the people and politics that have helped shape this place.

Sarawak has hosted humans for millennia.⁴⁹ Written records indicate that from the 1300s CE, Sarawak was at the periphery of maritime empires, first the Java-centered Majapahit Empire and then the Sultanate of Brunei two centuries later (Blussé and Gaastra 1998; Nagata 2011; Reid 2000). Coastal vassal settlements paid tribute to these empires, while upland people in the interior of Borneo participated in extensive trade networks that appeared to reach beyond Borneo, extending into China, perhaps as far back as 800 CE.⁵⁰ Sarawakians with Chinese heritage can trace their ances-

try in Sarawak for more than two centuries. In the 1600s CE, Ibans from the interior of Borneo expanded their sovereignty by waging war in present-day Sarawak (Dimbab et al. 2000; Jawan 1994).⁵¹

The era of European colonialism began in Sarawak in 1841, around twenty years after Sir Thomas Raffles founded Singapore as a trading post serving the British East Indies Company.⁵² James Brooke, the son of a colonial judge in British India, was inspired by Raffles to found a port to serve British maritime trading interests. In turn, the famous imperialist author Rudyard Kipling found a muse in James Brooke and his temerity. Kipling coined the verb “Sar-a-whack” to describe how an Englishman became the divine king of a land on the outskirts of the British Empire (Kipling 1919).

The historical record supports no such story of deification, but instead points to a story of subterfuge and gunboat diplomacy.⁵³ In 1841, on behalf of the sultan of Brunei, Brooke suppressed a rebellion in the coastal city of Kuching, at the mouth of the Sarawak River. He then demanded that the sultan cede to him the area’s control. Brooke’s power was concentrated in the area of the city of Kuching, and his rule over the kingdom of Sarawak was solidified by the use of excessive force, for which he faced charges in Singapore, on which he was ultimately acquitted (Brooke and Drummond 1853; Hume 1853). One of his policies, continued by his heirs, was to suppress headhunting in general, but also to encourage the practice when it suited the Rajah’s expansionist agenda (Pringle 1970). By harnessing such rituals, Brooke attempted to arrest the autonomy of headhunting people.

For a century, Brooke and his heirs autocratically ruled Sarawak. They fashioned themselves in the model of the British Raj by giving themselves the title of rajah.⁵⁴ They were known by the racially marked appellation “The White Rajahs,” which distinguished them from rajahs of the Indian subcontinent, who were subject to indirect rule by Britain. The White Rajahs were more autonomous. James Brooke’s nephew Charles Brooke (rajah, 1868–1917) inherited the throne, expanded the territory of the Raj, and made it a protectorate of the British Empire as the global timber industry boomed. One manifestation of this boom was the eventual development of Batu Nature Reserve, on which Batu Wildlife Center is located.

On the centennial of his ancestor’s control of Sarawak, Charles Vyner Brooke (rajah, 1917–46) promised eventual sovereignty and independence for Sarawakians.⁵⁵ He did not fulfill this promise. Three months later, the Imperial Japanese Army invaded Sarawak. The industries that made

Charles Vyner Brooke wealthy, namely oil and rubber, were of supreme interest to Japan in its effort to colonize Asia. Under these tumultuous circumstances, Sarawak's independence was never realized.

After the Imperial Japanese Army occupied Sarawak from 1941 until 1945, and after a period of British martial law, Charles Vyner Brooke returned from exile in Australia in 1946. Instead of officially abdicating power and granting Sarawak its independence as he had promised before the war, he ceded Sarawak to the British Crown and personally gained a third of Sarawak's financial reserve. Through this exchange, Sarawak's independence was further stymied. It remained a British crown colony from 1945 to 1963, even as decolonization officially ended elsewhere in the British Empire (Porrirt 1994).

Contingency seems to have brought Malaya, Sarawak, Sabah, and Singapore together in 1963 when they became the federal state of Malaysia, although Singapore left the federation a few years later to become an independent city-state.⁵⁶ The two land bodies of Borneo and the Malayan peninsula are separated from each other by hundreds of nautical miles. Until 1981, the two places had two different time zones. Sarawak is now a semiautonomous state of Malaysia. Its semiautonomy is expressed through its own immigration policies (He et al. 2007).

The distinction between Malaya and Sarawak is not just spatial. Sarawakians proudly lack a history of ethnic violence in lived human memory, unlike peninsular Malaysia or on the other side of the land border shared with Indonesia (*Kalimantan Barat*)—although anticommunist actions in twentieth-century Sarawak racially targeted Hakka Chinese minorities (Kua Kia 2008; Peluso and Watts 2001; Yong 2013). Sarawak is home to around thirty ethnic groups, the largest of which is the Iban. To be a local in Sarawak is to be at ease with multiculturalism, religious plurality, and other forms of difference.

Sarawak's relationship to the federal government is more fraught; although the territory is rich in natural resources, its human population is poorer than the peninsular Malaysian states. A point of contention, even for Sarawak's established politicians loyal to Malaysia's dominant political coalition, is that Sarawak retains only 5 percent of revenues from the oil and gas it produces (Yong 1998). Even after the fiftieth anniversary of Malaysia, the official holiday of Malaysian independence continues to be celebrated on the day that only the peninsular states of Malaya—not Malaysia—

became officially decolonized.⁵⁷ Disgruntled Sarawakians of all ethnicities continue to debate the merits of gaining independence from Malaysia, yet recent electoral politics show acquiescence to the status quo.⁵⁸

Most visitors who come to either of Sarawak's two wildlife centers to see semi-wild orangutans, including volunteers who come to perform hard labor for Sarawak's orangutan rehabilitation efforts, are unaware of this history. Yet the details matter greatly for the orangutans under their gaze and in their presence. It matters that indigenous people were evicted from the forests in which these orangutans now live, in the 1860s during Charles Brooke's reign as the second white rajah and then in the 1980s in postcolonial Sarawak, now a part of Malaysia. It matters that the trees these orangutans climb were planted in the 1920s for scientific forestry to extract more wealth from Sarawak and at the expense of original orangutan habitats. It matters that the monocultural forests along the highway route to Lundu are actually feral rubber trees that were planted by forced labor during Japanese military occupation. And it matters that the little space these semi-wild and captive orangutans now have is carved away by other interests, like the construction of a larger airport using sand mined at the edge of Batu Wildlife Center. Thus, Lisbet's failure to demonstrate independence within the confines of the park, or wildlife ranger Nadim's talk about the material constraints on the orangutan Wani's autonomy, as I describe in chapter 5, are part of a larger story about Sarawak's arrested autonomy.

Arrested autonomy is expressed in Sarawak's semiautonomous status. It is conveyed by orangutans who seem to be able to roam freely, but are actually constrained in a space shaped by colonial interventions on the land. It is evoked in Layang's conviction that one ought to do something but is instead actively prevented from doing so. Arrested autonomy is arrested decolonization in the face of ongoing colonialism when colonialism is supposed to be over. It is the frustration of having the means intended to foster independence instead work toward continued dependence. Such forms of arrested autonomy serve as a recurring trope in Sarawak's history since colonial contact.

The feeling of arrested autonomy is perhaps familiar to some readers, though it surfaces in different ways, with different figures, in different circumstances. Recovering drug users released after rehabilitation experience arrested autonomy (O'Neill 2013). Anyone who has been stuck in an institution has felt its limits pressing down even while being told that con-

traction is in preparation for a future expansion. The constraints on their freedom that orangutans experience and the constraints on their caretakers are related and to some extent shared.

Readers may feel uncomfortable with the idea that arrested autonomy could be shared between orangutans and people, especially when people who are racialized as native or who are denied the dignity of human rights are often treated “like animals.” But the insult of animality and the deprivation of humanity both depend on a colonial hierarchy in which some people are treated as less human than others (Weheliye 2014).⁵⁹ Rejecting colonialism also requires rejecting the refusal to acknowledge the possibility of shared experiences with nonhuman others, for lack of a better word. In other words, decolonization offers potential recognition that colonialism has brutal impacts for many of Earth’s inhabitants, many of whom are not human.

REHABILITATION

Lundu Wildlife Center is an orangutan rehabilitation center. Yet it looks remarkably like a zoo. Reconciling its appearance with its practices takes work, as I found out in a 2010 conversation with a commercial volunteer.

I stood on the viewing platform above the orangutan enclosures. A blond woman in her twenties toting a camera joined me as I finished jotting notes. She was an ecotourist finishing her monthlong volunteering stint, which cost about US\$4,000, excluding airfare. She struck up a conversation with me. I posed a question to her:

JUNO: How do you make sense of all this captivity?

VOLUNTEER: I came in with my Western hat on, having seen only babies and mothers, never having seen these huge males. With my Western hat, you think forest all around, why can’t we release them? But then you get here, you have to put on a local hat and see how it’s so complex, that you can’t just release them. *It’s sad to say this, but it’s like rehabilitating sex offenders.* You can’t just release them back into society. They need rehabilitation. It’s just so complex. [Pause] Everything’s a catch-22! They’re wild animals that can injure you. When I show these photos to my friends they’re like, “Why all the cages?” And I have to explain that before releasing them, there needs

to be some level of captivity and then you move on to semi-wild and then hopefully to a wild state. [My emphasis]

By equating displaced orangutans with sex offenders needing rehabilitation, this volunteer tried to reconcile the difficult truth that the orangutans she came to know actually spent most of their time in various states of captivity.⁶⁰ Her equation enabled her to imagine confinement in cages as a prison and enclosures as temporary; the orangutans' freedom would be gained gradually, until they were finally able to earn free-range autonomy in the forest.

Our conversation occurred years before international outrage at the news of a brutal and ultimately fatal gang rape on a public bus in India in 2013. At the time, neither of us could imagine how the sexual behavior of orangutans would be highlighted in international news media, when they were used to suggest that some individuals were biologically inclined to rape others—by extension, an explanation for human brutality and misogynistic cruelty (Lenin 2013). Indeed, biologists like Wrangham and Peterson (1996) reference orangutans as an example of a species in which forced copulation is a reproductive strategy “found in nature.”

By likening the adult male orangutan under our gaze to a sex criminal, the volunteer made explicit the way orangutans' sexuality could be used to justify their captivity. Seeing male orangutans as sex offenders naturalized the violence female orangutans experience when human activity physically confined them in the wildlife center. Such naturalization drew attention away from the human interventions that made this a space of “nature-culture” in which “nature” was performed in a built environment, built through a long history of human–animal–plant encounters (Cronon 1996; Haraway 2003; Sivaramakrishnan 1999; White 1995).

The volunteer's sentiment also expressed the idea of prison as a form of correction instead of punishment. This view perceives crime as an exercise of free will and moral turpitude requiring rehabilitation and not the result of an unfair justice system (Alexander 2010; Baldry et al. 2011; Davis 2003, 2012; Gilmore 2007; Kornhauser and Laster 2014; Tonry 2001). The rehabilitation center for orangutans, then, at least in the mind of volunteers like this one, was a promise of eventual release upon good behavior or penance in a species' penitentiary. Yet what was being corrected was also seen as inherent (Pandian 2008). As she said, semi-wild orangutans were still

“wild animals that can injure you.” How could rehabilitation work if it was fighting something innate?

The volunteer’s ability to reconcile with the point that orangutan rehabilitation was like rehabilitating sex offenders made me feel that orangutan rehabilitation was a deeply colonial project in a postcolonial place, even as the practices of orangutan rehabilitation evoked decolonizing possibility. The dream of achieving an eventual goal of freedom meant for her that the day-to-day life of captivity and constraint was perfectly acceptable. She took comfort in arrested autonomy.

Her desire for the orangutans’ physical freedom was ultimately constrained by her strong demand for personal safety. That vision of orangutan freedom would push orangutans to enter “society” when orangutans as a species would likely reject such social belonging. Postcolonial governance in the form of land administration and tourist visas limit her colonial aspirations for achieving the eventual independence of others: no, they cannot just be released when forest is all around and when she thinks it’s fit. No, she cannot stay indefinitely in Sarawak to see if or how such a release to society occurs. If she were to reject the wish for safety, if she abandoned the metaphor of rehabilitation as a penitentiary, if the thrill of temporarily visiting the interface of extinction became the dull pain of empathetically sensing another’s suffering under conditions that look like her definition of happiness, what could be otherwise?

Iban workers had different attitudes than this volunteer. Kak had been employed by the volunteer company to work as the orangutan nanny. She lived in the Iban longhouse where Apai Julai was the headman, and she hailed from Ulu Sebuyau, the area where Alfred Russel Wallace was based during his explorations of Sarawak a century and half before. Kak explained that orangutans evoke the feeling of *geli*, a creepy abhorrence, the feeling of seeing something close up that you should not be seeing. Layang, the unofficial expert on site, recognized the orangutans’ distinct personalities—Ching could whistle and she once hid a key in her mouth for two days; James was a huge male with flanges beginning to develop on his cheeks, yet he was afraid of groups of people. If semi-wild orangutans were prisoners, they were wrongly confined. For Layang, and for the people he influenced with his ideas and practices, rehabilitation was not about suppressing orangutan behavior, but about experimenting with ways of inhabiting the same

space—not by imposing a sense of safety, as the volunteer supported, but by embracing the risk of vulnerability. Inspired by Layang, I feel that decolonizing extinction would require letting go of the aspiration for a safe inequality, even if one risks experiencing pain.

CHAPTERS

This book requires its readers to recognize place, time, and circumstance: How are people, animals, plants, bacteria, and other earthly bodies encountering one another at a given moment? What possibilities are generated when they are together in the same place and time in a fleeting moment, whether that shared moment is over seconds or millions of years?⁶¹

The embodied relations that happen at these wildlife centers push us to consider how to live and die with others. We can no longer entertain the fantasy of autonomous, isolated living—as seductive as that fantasy may be when we want to picture orangutans roaming freely in the grand forest canopy. Instead, the interface between displaced orangutans and the people caring for them teaches us that living together, when our existence is threatened by slow but cataclysmic transformations, entails becoming vulnerable to one another, risking even the possibility of losing our own lives.

The giving in to risk and sacrifice occurs in a context of violence, where some who exist on this planet, including some who are also human, are more readily subject to force, manipulation, and imposition than others. These forms of violence are expressed through variations of intersubjective and structural relations: orangutan habitat loss resulting from the colonial and later the postcolonial extractive economy of forestry and sand mining, the forces that pushed indigenous Sarawakians to survive through wage labor and to indefinitely defer independence for all Sarawakians, or global capitalist inequalities that volunteers try to ease and anthropologists like me try to understand.

My goal in decolonizing extinction is not to transfer the power of decision making to newly appointed experts who better understand such violence. Replacing a timber tycoon with a conservationist at the top of the chain is not enough. Rather, I believe that decolonizing extinction requires a fundamental reorientation toward others, especially nonhuman others, in which we accept the risk of living together, even when others' lives pose

dangers to our own. I make these arguments in six chapters divided into three sections.

Chapters 1 and 2 together examine how people build social relations with members of a species famous for a love of solitude. Such sociality is embroiled with differences forged by colonial hierarchies, political economy, evolutionary distance and notions of race, gender, sexuality, and species. Relations are generated through a contingently shared interface.

Chapter 1 examines the first-ever orangutan rehabilitation experiment run by Barbara Harrison of the Sarawak Museum. I interpret her “ape motherhood” as an effort at instilling independence among orphaned orangutans in the 1950s and 1960s, in the midst of debate around Sarawak’s independence following official decolonization. This chapter traces how the ideology of “ape motherhood” was replaced by the contemporary concept of “tough love” and shows how both ideals are informed by ideas of gender as well as colonial and postcolonial conditions of labor.

Chapter 2 considers how affect, sensed on the surface of skin and grounded in a specific planetary surface, generates a global economy of commercial volunteerism. Examples of affective encounters include the everyday, ordinary, and yet extraordinary chores of the wildlife center staff and volunteers: evacuating orangutans, cleaning their cages, and carrying out hard manual labor. Even the technological mediation of “crittercams” cannot replace the experience of bodily presence with a member of an elusive and endangered species in the same space and time.

Chapters 3 and 4 together consider the problem of enclosures as experienced by both wildlife and their caretakers. “Enclosure” refers to the place where captive wildlife dwell. It is synonymous with “exhibit,” although the concept of enclosure is more oriented toward the animal being housed, while the concept of exhibit is more oriented toward its pedagogical function for human visitors. The concept of enclosure also implies the dismantling of commonly held lands; the subsequent displacement, dispossession, and eviction of peasants; and the push for them to become wage laborers as a means of survival (Grandia 2012; Marx 1981; Polanyi 2001; Thompson 1968, 1975). Enclosure is shorthand for a shared interface of loss between displaced wildlife who have nowhere else to go and displaced people with few options but to work for wages to survive.⁶²

Chapter 3 considers the impact of space on the social lives of orangutans. Semi-wild orangutans live in insufficient space, which, paired with the

human tendency to blame extinction on insufficient sexual reproduction, exacerbates the problem of forced copulation that female orangutans are made to bear. The ranger Nadim succinctly describes the semi-wild orangutan's state as "free but fearful." How people on the ground justify a system of sexual violence shows both the possibilities and the limits of empathy. It compels us to consider how we use the word *rape*.

Chapter 4 examines the transformative loss shared between displaced indigenous caretakers at Lundu Wildlife Center and the animals under their care: crocodiles, turtles, sun bears, as well as orangutans. Both wildlife and their caretakers must "*cari makan*," which translates from Malay to English as "find food" and is used as a local idiom for wage labor.⁶³ In this chapter, I am interested in the ways wage labor forces the alienation of people from animals, replacing older notions of them as omens and kin with new kinds of knowledge.

Together, chapters 5 and 6 consider a range of possibilities for a future in such constrained conditions. Futures here have a double meaning: both financial capitalization when orangutans are considered assets from which to draw future profit through their scarcity and the liberatory futurism of decolonization. I conclude the section by engaging the dilemma of what kind of future is possible when we live with nonhuman others whose livelihoods are simply deadly, like endemic microbes that are also bioterrorist agents.

Chapter 5 returns to *bebas*, the word that caretakers use to describe semi-wild orangutans' freedom. *Bebas*, which I translate as physical autonomy or freedom, offers a theory of decolonization, one that shows how autonomy is currently arrested for Sarawak's orangutans and for Sarawak's people. This chapter considers the scope of the *longue durée* by pursuing the etymology of the terms that we use to envision political futures.

Chapter 6 unpacks an idea inspired by a volunteer's grandmother: the wildlife center operates as a hospice for a dying species. Hospice is a useful analogy, considering it as a place of care when freedom outside of confinement ceases to be possible, in which caregiving is compensated with wages, in which both caregivers and care receivers are vulnerable to harm, and in its operations as a commercial or for-profit institution. The analogy reaches its limit at the point when caring interventions stop and death cannot be willed away.

Loss evokes the pain of absence—that flash of inconsolable longing when you contemplate objects that have outlasted loved ones (Rosaldo 2013).⁶⁴

Annihilation is loss amplified on a scale so vast that it is hardly fathomable (Masco 2006). Unlike nuclear holocaust, the extinction of orangutans poses no existential threat to all of humanity. Yet the fact that orangutans' survival in the future is contingent on human actions illustrates all too well that our own existence on this planet is shaped by relations with others, including and especially nonhumans.

This is not a time to fatalistically give up on caring how others try to eke out a living under dire circumstances. My purpose here is to encourage alternatives to what projected futures might hold by highlighting what can be observed. My hope is that we can seriously consider what could be otherwise.