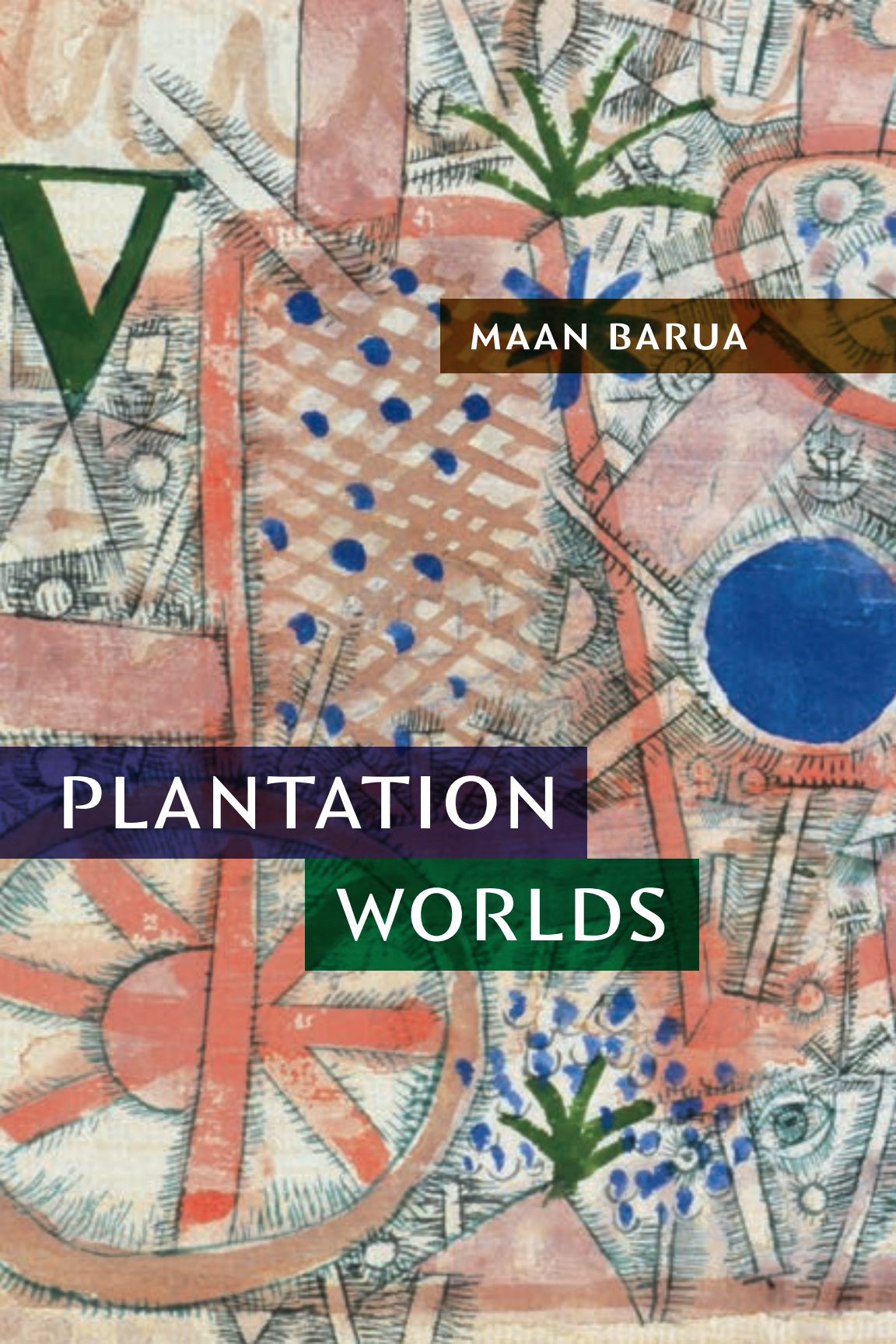
MAAN BARUA
PLANTATION
WORLDS

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For Rana Uncle and Ben Jethai

Rana Partap Behal,
doyen of plantation labor history

Monisha Behal,
who has worked tirelessly for the women of Assam

CONTENTS

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Introduction

Postcolonial Fauna

Only the sound of feet sinking into mud interrupts the cicadas. Searchlights echo in the far distance, flashed by people who are awake, alert. Then that barely audible patterned sound, familiar to those who live in the edges of Assam's forests, softly pierces the humid air: the hollow grating of rice paddy being uprooted, muffled splashes of water as stalks are threshed to remove clinging earth, punctuated every now and then by low rumbles. This pattern repeats for about half an hour, but there is nothing to be seen. The sounds slowly retreat and then wither away. The landscape is momentarily still before the ringing of cicadas engulfs the wet September night.

The next morning, when I return, evidence of elephant presence is everywhere (figure I.1). The tracks of what appear to be a herd of four run through gardens and fields belonging to a community of tea plantation workers. A plot of rice paddy, grown for subsistence, lies trampled. The manicured

I.1 Earth/life: tracks of a herd of four. Photo by the author.

tea bushes of a plantation are unsettled, coated with a film of mud that has rubbed off from proboscidean bodies. Bricks from a demolished wall lie scattered, sparking the ire of the workers. "The elephants broke [into] seven or eight houses to get food," says Putru, a wage laborer from the Adivasi community in the Phulbari Tea Estate. "It is a regular occurrence. They no longer live in reserved forests but in and around the plantations. Raiding crops and breaking into the labor lines at night has become their habit." "It is like carrying out an eviction," adds Putru's neighbor Andreas. "The animals belong to the government, but we have to live with them. There is no alternative of moving out of here. With so many mouths to feed, what will we do?"

The landscape of Sonitpur in the northeastern Indian state of Assam, where this event unfolded, harbors what might be called postcolonial fauna, that is, fauna that has been historically transformed by colonialism as it altered landscapes and worked upon plant and animal bodies, giving rise to a fraught politics of earth and life.[1] Fissured into distinct settlements, with reserves for wildlife and spaces for people, earth becomes a terrain of contestation, underlined by a mass enclosure of land by tea plantations and forestry in the late nineteenth century that mobilized colonial capital and the toil of migrant labor brought to Assam to work under conditions of indenture. At

the same time, the lively tracks of elephants unsettle enclosure by knitting forest and habitation, plantation and plot in new spatial combinations. In postcolonial India, elephants have begun to cultivate novel habits to adapt to this unprecedented change in their landscape. What emerges is a politics of dwelling, for elephants have become powerful vehicles for asserting control over enormous tracts of land. The rural poor liken the animals' forays into settlements to evictions. This is not a mere analogy, for elephants are inexorably caught up with violent expulsions the state continues to carry out in the name of conservation.

Postcolonial fauna are symptomatic of what scholars have termed a Plantationocene: an unparalleled transformation of the planet's landscapes through the racial and colonial exploitation of labor, leading to a dominance of monocrop agriculture and capitalist systems of production.[2] This book is concerned with the travails set in motion by plantations and the altered ecologies to which they give rise. It asks questions about habitability and what livability means amid immiseration and the routine violence that plantations spawn. It looks at how elephants and people make worlds in the face of unprecedented environmental change and how such worlds are sustained in spite of relentless dispossession. More importantly, it queries planetary transformations, not through a promontory viewpoint, and not solely from the Global South. It does so by looking and thinking from a region that is a South within the South.

But before delving into debates on specifying and categorizing environmental transformations and prior to outlining the argument of this book, I want to take the reader on a foray through the worlds of people and elephants, a foray that has been part of a large portion of my own life. I grew up in the landscapes I write about in this book, a region that I still call "home" and to which I return every year. This journey might give us a sense of what it means to inhabit landscapes fissured by colonial history and why a Plantationocene might be an alternative starting point for understanding planetary change. In light of an explosion of scholarship on novel natures and wildlife in the Anthropocene, some of which eschews colonial histories and summons the singular figure of *anthropos* or humanity as a whole as an agent of change, the worlds of people and elephants might enable one to slow down. They might create a slightly different awareness of how relations between earth and life are historically and politically molten.

I.2 Denizens of a Plantationocene: the SP04 herd in a tea plantation (*left to right:* Tara-4, Tara-3, Tara-1, and Tara-5). Photo by the author.

The Diagram of Enclosure

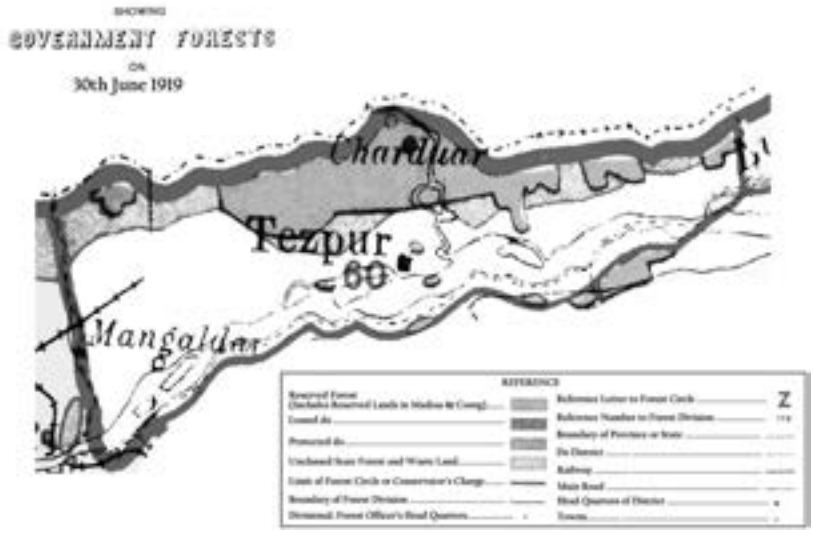
The elephant tracks encountered in the opening vignette are those of a herd of four bulls, named SP04 by a group of researchers who have been monitoring the animals' movements in Sonitpur. Led by Tara-1, the dominant *mukhna* or tuskless bull, SP04 is adept at raiding crops and breaking into houses to obtain stored food grain. The three other elephants in the herd are Tara-3, a subadult male approximately ten years old, whose small tushes suggest that he is likely to grow into a tusker, Tara-4, and Tara-5 (figure I.2). A fifth elephant, Tara-2, had left the herd before I commenced fieldwork with the Assam Haathi Project (AHP) team studying the elephants. The prefix *Tara* was derived from Tarajuli, a tea plantation where Dhruba Das, a member of the AHP, first identified them.

The movements of SP04 might be seen as boundary crossings of a particular kind: a transgression from areas demarcated as reserved forests to those spaces allocated for human settlement. This parceling of land in Sonitpur into the space for Nature and that for Society is underpinned by a colonial history, one that is vital for understanding the fraught politics of

planetary transformations, giving rise to a condition that might be understood through the devastating effects of plantations when the analytical gaze is situated outward from locales such as Assam. In 1873, the newly formed colonial Forest Department in Assam brought large tracts of land under its control. Regulations under the Indian Forest Act of 1865 thwarted people's access to forest land, customary rights to farm were effaced, and grazing cattle or collecting firewood stopped.[3] The cartographic demarcation of reserved forests operated, in the Forest Department's words, with the logic of fencing "strictly what we could find really merchantable timber growth" while "[leaving] the rest to the uses of the local population."[4] Through enclosure, Assam's forests became sites for systemic revenue extraction. Guided by a quest to maximize profit, the Forest Department began rubber plantations in Sonitpur's forests, transforming heterogeneous stands of trees into monoculture. The cordoning off of forests continued well into the middle of the twentieth century. By 1950, the area of land under the Forest Department's control in the wider Darrang, the erstwhile administrative district in which present-day Sonitpur lies, more than doubled, constituting as much as 17 percent of its total area.[5]

Colonial attempts to control and order the Sonitpur landscape were fostered by the emergence of a new diagram of power.[6] A diagram is an informal dimension, a relation of forces akin to a map that organizes practices, distributes functions, and allocates resources, becoming coextensive with an entire social and ecological field. Power operates diagrammatically by creating new fields of visibility. Cartographic surveys, taxonomies of flora, and catalogs of valuable forest produce generated by colonial forestry gave rise to a luminous environment, one that visualized Sonitpur's jungles as a commercial resource (figure I.3). As an informal dimension, a diagram traverses the discursive and the nondiscursive, the formed and the unformed. New forest acts and legislations were the discursive elements of control, while material practices of boundary demarcation, the policing of certain practices and distributing bodies in space, were its nondiscursive elements. By making advanced claims on uncultivated and uninhabited land, colonial power worked on what was unformed. What resulted was a model of enclosure and the institution of a binary between forests and human habitation, a separation of Nature and Society that did not emerge from Cartesian conjectures but was constituted through colonial modes of governance and control.

The diagrammatic logic of controlling bodies and regulating people's practices was inherently about bringing the landscape and its denizens



I.3 Enclosure: reserved forests set aside for commercial forestry in Darrang (now Sonitpur), 1919, upon which the contemporary map of elephant reserves is superimposed. Source: Bodleian Library, Oxford University.

into the realm of calculability and profit. The latter also extended to elephants. The colonial government sought to gain a monopoly over the elephant trade that had been in operation in Assam since precolonial times, run mainly by feudal estates and private contractors.[7] In 1873, as enclosures began to take hold, the Forest Department brought elephant capture "under more precise regulations." Every district in Assam was divided into *mahals* or leases for elephant capture, partitioned "according to the number of *poongs* or salt-licks in each."[8] Leases were sold annually by auction and, in addition, the government reserved a royalty of £60 per animal caught.[9] The government also retained the rights to purchase any animal over seven feet in height.[10]

In the eyes of the colonial administration, elephants were "distinctly a forest produce."[11] Like forests, the animals were visualized as and transformed into a resource for generating revenue. What began as regulation of elephant capture soon gave way to complete colonial monopoly over the elephant trade. In 1879, an Elephants' Preservation Act was instituted, whereupon no wild elephant could be killed, injured, or captured unless

it was an act of self-defense or when the animals caused serious damage to settlements and cultivation.[12] This imperative was not based on ethical considerations. Rather, it had to do with the fact that elephants were living infrastructure that served as beasts of burden for the expansion and administration of empire. Elephants were mobilized to further colonial claims over territory and resources. Vast tracts of land were barred from being opened up for agriculture on grounds that they contained elephant populations that could be captured in the future.[13]

A significant outcome of enclosure was that it led to colonial ownership over elephants, giving the state the authority to dictate how modes of human-elephant cohabitation should unfold on the ground, irrespective of whether the animals inhabited reserved forests or dwelled outside them. The legacies of enclosure continue in the present day, reflected in people's association of elephants with the state. Furthermore, the diagram of enclosure introduced yet another schism in the landscape. The act of inhabiting a landscape was inverted into that of occupation,[14] whereby worlds are laid out in advance by a dominant authority to regulate bodies and govern access to resources. This found its fullest expression in the 1940s when, in spite of intense opposition, the Assam Legislative Assembly adopted a bill empowering the Forest Department to evict anyone found occupying forest land.[15] And yet, every diagram has "certain relatively unbound points, points of creativity, change and resistance."[16] Landscapes are never settled by power: certain points fall off and even challenge their spatial order.

Unbound Points

What is striking about SP04 is that it is an all-male group. The association of the four bulls is relatively durable: the animals have grouped together for a period of about three years. Asian elephant herds are typically matriarchal. Bulls born into matriarchal natal groups continue to stay in these herds until adolescence, after which they disperse and are predominantly solitary.[17] Loose associations sometimes form between bulls, where animals band together to raid crop fields at night and disperse during the daytime, a strategy elephants adopt to reduce the risk of human retaliation when venturing into people-dominated landscapes.[18]

Relatively stable all-male associations, however, are novel. Archival accounts of elephants in the Sonitpur landscape reveal how, throughout most

of the twentieth century, crop-raiding bulls were predominantly solitary animals. For instance, in the early twentieth century, several bounties were offered for the destruction of solitary bull elephants that had been "doing serious damage to tea" and other crops in Sonitpur.[19] The colonial administration used the term *intruder* to describe such animals,[20] indicating how entrenched spatial binaries between forest and settlement had become. Offers by the government to keep the elephants' tusks provided incentives for licensed hunters to shoot animals declared rogues.[21] However, not all bull Asian elephants have tusks. *Mukhnas* or tuskless males—like Tara-1 of the SP04 herd—are common. In 1935, amid complaints regarding elephant depredation from tea plantations and farmers, the Forest Department introduced an Elephant Control Scheme. Approved and armed sportsmen were further incentivized by being offered a "free" tusker "for every corresponding *Mukhna* destroyed."[22]

What elephants might have made of bloody encounters with colonial sportsmen is difficult to ascertain from the archives, given their resolution and grain. Yet archival stories indicate how colonial hunting shaped proboscidean dispositions. Efforts to control elephants resulted in a number of wounded animals, inducing "an ugly temper" in animals that could not be put down.[23] As sentient creatures with a great capacity for memory, capable of recognizing individual humans and even distinguishing between communities based on odor and garment color,[24] one might contemplate whether some of the animals declared a problem were themselves products of violent colonial encounters.

Some cues specific to the Assam landscape are provided in the accounts of Frank Nicholls, a tea planter and *shikari* who spent fifty years in Sonitpur in the first half of the twentieth century. Nicholls describes how a "bad" tusker disrupted their attempts at cutting a path through a forest that lay in "exceedingly wild country." Seeing unfamiliar people in the forest, the "determined tusker" chased Nicholls's *mahout* "for three consecutive days." On another occasion, the same individual killed a man from an elephant-capture party whose attempt to strike the elephant with a knife was of no avail.[25] Nicholls put down the animal when it charged his elephant a few years later. The signs of past encounters on the animal's body were telling. It had the mark of the dead man's knife blow, as well as an "old bullet wound" inflicted by Nicholls himself.[26] The elephant's disposition was certainly shaped by past, painful encounters, and they probably had bearings on how the animal sensed transformations that were taking place in the Sonitpur landscape.

Shuttling between field and archive, ethnography and ethology, gives one a sense of how postcolonial fauna emerges. It is only in recent times that all-male herds like SP04 are being documented. The ethologist Anindya Sinha and his colleagues contend that such novel elephant "cultures" are a response to inhabiting peopled landscapes—milieus that are unpredictable and laden with risk.[27] The sizes of such all-male herds also tend to increase when elephants take to living in agricultural and plantation landscapes, a tactic of creating safety through numbers. Such novel behavior, Sinha and colleagues argue, is environmentally rather than biologically influenced.[28] Put another way, one could contend that such emergent elephant cultures are a response to inhabiting a Plantationocene, an adaptation to the upheavals of landscape colonialism set in motion.

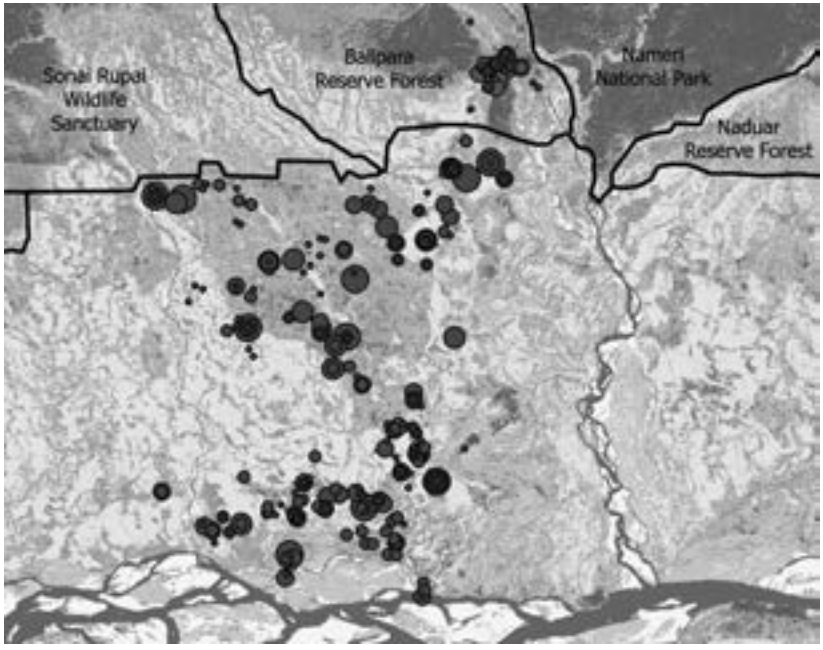
Tracking SP04's movements with the AHP team is an activity of feet following quadruped soles. Tracking also animates a landscape's past. The herd leads us through different parts of Sonitpur: in Phulbari Tea Estate we see Tara-1 stand up, alert, as the other individuals rest, and a group of women pluck tea nearby. We move through the Harchora Tea Estate, established in the 1850s, with its long rows of labor lines housing its Adivasi workforce. As far back as 1911, elephants would arrive in Harchora "at night to eat the long succulent grasses" that grew by a small river SP04 wades through.[29] As with forest reserves, the emergence of tea plantations too proceeded through a violent history of enclosure. Colonial money capital was invested to grab land and initiate monoculture tea plantations in the 1850s, aided by extremely liberal grants from the colonial administration.[30] The first plantation in Sonitpur was set up in 1854 and, less than a decade later, nearly twenty thousand acres of land had come under the control of private plantation companies.[31] This transformation of landscape into monoculture was achieved through the toil of indentured labor, brought to Assam under the most despicable of conditions. Between 1863 and 1868 alone, over fifty thousand workers were, to use the colonial administration's expression, "imported" to Assam. As many as seventeen hundred people died en route.[32]

The movements of SP04 also enliven other elements of colonial pasts that coexist with a landscape's presents, known to animate bodies, human and other-than-human,[33] in their own, corporeal ways. The animals guide us into parts of the Balipara Reserved Forest where timber plantations from the 1870s still persist. The herd then ventures into localities we refrain from entering, as they are hideouts of secessionist rebels. When they resurface, we follow SP04 south toward Goroimari, a former elephant habitat requisitioned

to build an air base in 1950.[34] Approximately forty to forty-five years old, Tara-1 was not born at the time. However, it is plausible that members of his erstwhile natal troop frequented such places. The tracks that the animals forge are thus not mere lines through blank space. They are replete with memories and other-than-human knowledge, gained through a perceptual engagement with landscape.

Elephants' apprehension of a landscape's topography and its durations, however, is very different from that of bipedal, and primarily ocular, humans. As Dhruba from the AHP remarks, "Elephants encounter the world sensually. We, on the other hand, do so intently." Elephants live in another sensory world of audition, olfaction, and tactility. They communicate over long distances and at low frequencies inaudible to the human ear. Such sound waves can travel up to almost 10 kilometers, covering an area of 300 square kilometers,[35] although their reach in forest and plantation landscapes is not always so far. Traffic and activities during the daytime also increase ambient noise. The auditory world of elephants thus shrinks and expands in tune with other rhythms of the landscape. Low-frequency elephant rumbles, however, travel even further through the ground. Elephants deploy their feet to sense these waves and to communicate over scales and distances not possible for humans when unaided by technology.[36] Through elephants' sensory and sentient worlds, the landscape therefore takes on another meaning: it becomes a medium of communication.

Tracking thus foregrounds how landscapes are not solely human arrangements. Their extent and shape are also folded according to the ways in which other bodies sense and apprehend the world. A map of SP04's movements shows how elephants' tracks unbind from the diagram of enclosure (figure I.4). As Dhruba explains, "We might designate specific reserved forests for elephants, but this is very different from the ways in which elephants apprehend their habitat. For all you know, elephants might consider 'our space'—settlements and agriculture—to be 'their space' as well." What is noticeable about SP04's movements is that they live predominantly outside protected areas. Such modes of dwelling strike at the heart of the contemporary imagination that elephants ought to inhabit spaces allocated to them: reserved forests, wildlife sanctuaries, and national parks. Female-led groups, on the other hand, venture into human settlements and crop fields but, unlike SP04, do not inhabit plantations and agrarian landscapes for prolonged durations. The all-male herd is a distinct outcome of a number of forces acting in conjunction: deforestation and the transformation of jungles



I.4 Unbound points. Map of SP04's movements, where circles depict clustered activity, much of which is outside protected areas (indicated by black line). Source: Assam Haathi Project, Ecosystems India and Chester Zoo; forest boundaries added.

into monoculture, the capacity of the animals to adapt, and the questions posed of them as they inhabit a landscape riven with frictions.

The Politics of Living Alongside

If the ecologies of elephants are altered by colonial and postcolonial reconfigurations of a milieu, there is also a distinct politics of living alongside these megaherbivores.[37] Dwelling with elephants is a fraught endeavor, particularly for rural Assamese peasants dispossessed by erstwhile forest enclosures and the plantation economy, as well as for the Adivasi tea plantation worker community, whose landholdings have always been meager given their history of migration and indenture.[38] Wide-scale deforestation of the Sonitpur landscape in the 1990s, which proceeded through informal concessions

and opportunistic felling during moments of political turmoil, have further spurred elephant incursions into settlements and crop fields. Such incursions, imposing significant burdens on people, are skilled activities, learned by elephants through negotiations, observation, and emulation.

Like the AHP team, people who inhabit the landscape are also acute observers of elephant behavior. Many are familiar with SP04, although they do not have a name for the herd. Putru, whom we encountered in the opening of this chapter, recounts how "four elephants came at night and broke into the room" in which he was sleeping. "Not finding any food, they demolished my neighbor's kitchen wall, followed by a couple of other houses, only to come back here again." Living with his wife and young child, elephant presence poses significant risk for Putru's family: "I desperately tried to stop them, but they charge and will trample you! Their arrival is so sudden that there is not even time to light a fire. What will you do?"

A Plantationocene landscape is thus laden with risks, which both the rural poor and elephants have to negotiate. Vulnerabilities generated historically and those in the present are crucial in the formation of an all-male herd. For many adolescent bulls, venturing into new areas after leaving their natal group is not straightforward, especially when they lack knowledge of the risks a landscape poses. Between 2003 and 2016, Sonitpur witnessed 138 reported elephant mortalities, some of which involved deliberate electrocution and poisoning by people frustrated by depredation.[39] In 2001, an unprecedented death of seventeen elephants was reported in Sonitpur. Poisoning by pesticide was one identified cause. Reports suggested that "local villagers or tea garden labourers" did so in relation to "elephants causing destruction to crops, property and life on a regular basis."[40] Irate denizens of the village of Haleswar even scrawled the words "Paddy thief elephant . . . [bin] Laden" in Assamese on the body of one poisoned animal (figure I.5). The reference to Osama bin Laden, a household name in Assam at the time, was an allusion to the terror elephants were perceived to cause.

Elephants that inhabit Sonitpur are potentially living witnesses to such past events. As long-lived creatures, elephants sustain memories, including intimate knowledge of the places in which members of their group have died.[41] Older animals thus have a tacit grasp of the landscape, the opportunities it presents, and the risks it poses. Tara-1 is skilled in negotiating Sonitpur's patchwork of tea plantations, crop fields, and forests, having learned where not to venture, what not to touch or eat during the course of his lifetime. Tara-1 is also adept at finding sources of food and places of

I.5 "Paddy thief elephant . . . Laden," scrawled on the body of a poisoned elephant. Haleswar, October 2001. Photo: Sunil Subba Kyarong/Wildlife Trust of India.

safety. Being in the company of another skilled animal benefits younger individuals like Tara-3 who, over time and through cultivated habits and emulation, gain an expertise in dwelling in friction-laden landscapes.

As Dhruba tells me while inspecting a house damaged by the herd, SP04 has become proficient in accessing food grain stored in people's homes. "If you look at SP04's timings, there is always an 'element of surprise' in their raids," says Dhruba. "That is why they are successful. Led by Tara-1, they have become very clever. Seldom will you see them venturing into villages in the early hours of the evening when people are up and generally alert. They are likely to be chased out then." Such knowledge, gathered through trial and error, unsettles the idea that humans are the only knowing subjects of a landscape, just as it redistributes who or what apprehends and forges a living and livable milieu. Ethological studies of elephants reveal that individuals within a social group may derive significant benefits from the influence of an older leader, partly because of their enhanced abilities in making crucial decisions about threats.[42] Over the years the AHP team has been following the herd of bulls, Dhruba has noticed how Tara-3's skills in crop raiding and breaking into houses are becoming more attuned: "Tara-3

used to be a very aggressive elephant. Nowadays he has become calmer, and his technique of breaking into houses has begun to mimic Tara-1's: to do so causing minimal damage."

Many inhabitants of Sonitpur allude to this enskilment elephants have undergone. Echoing Dhruba's observations of SP04's decision making, Putru says these particular elephants are "unreliable." They turn up at unexpected hours and at any time of year, not during the fallow winter months alone. "None of them have tusks," he adds, clearly identifying the animals. "These individuals roam around in our vicinity, entering villages and breaking houses." Andreas, Putru's neighbor, whose house was broken into three times, discerns how they differ from "other herds that raid crops." "If you chase those animals, they leave the fields and go away. But not these elephants. They are obstinate and break houses." He further tells me that "entering homes has become [the herd's] habit," providing an astute insight into the transformation of elephants' lives and the rise of postcolonial fauna. "The elephants *know* what to do," says Andreas. "They have become just like humans."

These encounters are inherently asymmetrical, given that elephants are protected by the state. Colonial legislation now informs how certain people view the animals. "Anything that inhabits forests belongs to the government," says Putru, "elephants being one of them. The government has employed foresters. It is their duty to ensure that government animals do not venture into our fields and homes." Through the 1990s, the Forest Department undertook several, often violent, eviction drives in Sonitpur to resettle people who had encroached upon forest land,[43] actions legitimized by laws put in place in the 1940s. People invoke the violence of eviction to describe elephants' actions. "These elephants are government dacoits," remarks Preeti Bahadur, another Sonitpur resident. "Like the Forest Department, they carry out evictions in our villages." This comparison of elephant incursions with actions of the state reveals how a colonial past continues to operate as a duration, combining with the present in novel ways and bursting through to create fraught combinations and arrangements.

Preeti Bahadur in fact abandoned cultivating his vegetable fields due to elephant presence. Putru, on the other hand, contemplates moving elsewhere. "With a wife and child at home, I can't even travel anywhere," he remarks. "I would like to move out of here, but alternate options are very limited." Elephant presence has in fact resulted in erstwhile homesteads and gardens being abandoned (figure I.6). "Isolated homesteads become

I.6 SP04 grazing in an abandoned hamlet belonging to an Adivasi community. The patch is overrun by *Mikania*, a nonnative vine. Photo by the author.

unsafe for people at night," Dhruba remarks, pointing to how living alongside elephants is a fraught practice. "As a result, people shift elsewhere, usually to larger villages where they feel more secure." As the undergrowth takes over, these sites become proboscidean spaces once again: locales amid human settlement and plantations that reflect elephants' own ways, ends, and doings. Yet the emergence of such proboscidean spaces is contingent upon structural inequalities. The houses of the Adivasi community tend to be more frequently damaged by elephants, a phenomenon that is not mere chance or coincidence, but dictated by the fact that many, after leaving the plantations, settle down in the fringe of larger villages, near rivers and forests. Their dwellings too are seldom made of concrete and offer limited resistance to elephant incursions.

These transformations of landscape, underpinned by the colonial history of forest enclosure and the violent creation of plantations, draw attention to the multiple ways in which worlds are made amid the eviscerations and ruins of what one could call a Plantationocene. They point to the need for developing an alternate political ecology, one that recognizes both people and elephants to be immersed in overlapping histories of dispossession, erasure, and exploitation, histories that operate in tandem, which might have elements that are shared, but which are also replete with trajectories that

diverge. Such manifold and situated histories can become starting points for imagining landscapes and inhabitation in other ways. A foray into the worlds of elephants and people in Assam also challenges grand narratives of planetary change. It situates environmental transformations in particular places—places on the planet that are not simply underdeveloped regions, the Souths within the Global South, but loci that are vital for grasping the dynamics and politics of earth and life. They furnish steps toward an ecology of a Plantationocene, an ecology that the chapters of this book seek to elucidate.

Plantation Worlds

This transformation of life and earth—the *bio* and the *geo*—and the ways in which they are underlined by a racial and colonial history, and whose legacies endure or recombine with other forces to forge a fraught postcolonial present, are this book's central concerns. More specifically, it aims to specify ecologies of a Plantationocene present, narrated through the lifeworlds of elephants and their relations with people, as well as the particular kinds of living and material worlds these relations summon. The lives of rural Assamese farmers and of the Adivasi community are at the center of this work. My endeavor here is not to write a history of plantations and colonial forestry, and neither is it an ethnography of labor on Assam's tea plantations. Rather, what marks out this book is its attention to a "plantation multiple," where plantation logics or the production of sameness, the violent exploitation of human labor and other-than-human work, the transterritorial circulation of biota, the generation of simplified ecologies, and the ongoingness of extraction and plunder proliferate and become extensive with a wider set of practices in a social and ecological field.[44] A further thread running through this work is elephant conservation in a Plantationocene, examining the various ways in which the postcolonial Indian state deploys the animal to govern large tracts of land. Through these avenues, the book looks at how worlds are made amid the eviscerations of plantations and ruins of a Plantationocene, a making where people and elephants also subvert, challenge, and deterritorialize plantation logics to forge other ways of inhabiting, along and against the grain of established order. This book is an outcome of longitudinal research conducted over the past fifteen years, but it also derives from a much longer engagement of having lived and grown

up in the very rural landscape that I write about. I remain uneasy about and skeptical of the use of terms such as *field*, commonplace in the interpretative social sciences—especially those that have historically been caught up in projects of colonialism—for divisions between home and site of study, friend, neighbor, and interlocutor are in this case tenuously drawn. The same holds for the blurred lines between history and memory: many of the violent events of the 1990s—secessionist militancy, military intervention, mass deforestation, and incursions of elephants into settlement—described here were part of my childhood. This vantage point has allowed me to think much more carefully with duration. At the same time, the book's endeavor to think planetarity differently and to maintain some critical distance from terms such as *the South Asian Anthropocene* stems from my own experience of having grown up in what is the South within the Global South.

To this end, chapter 1 ("Plantationocene") builds on emerging work that queries themes regarding planetary change, altered forms and distributions of life, and ecological crises that emerge in their wake.[45] The emphasis of the chapter is not to intervene in debates regarding stratigraphic signatures or to propose yet another name for a new geological epoch. Rather, its aim is to recalibrate how and from where one grasps planetarity and global environmental change, taking Assam's riven landscapes and plantations as a point of departure. By uncovering histories through which a plantation multiple took hold, I show how colonial violence cemented divisions between nature and society, and exploited a resource frontier with devastating consequences for both people and other-than-human life. Many of these forces continue to operate in the postcolonial—or neo-colonial—present.

The preceding pages and chapters that follow draw from what could be called a more-than-human ethnography, in that the ethnographic orientation is directed toward transversal processes cutting across heterogeneous assemblies of people, animals, plants, spirits, and things, rather than the category of "species" and dyadic relations between people and other-than-humans that have become the staple of "multispecies" ethnographies.[46] If ethnography entails participant observation, a more-than-human ethnography takes both people and elephants to be observant participants of the same world both inhabit, a world that at times operates in common and at other times in tandem, where histories of enclosure, exploitation, plunder, and dispossession overlap but also diverge. This endeavor retrieves the ecology sometimes evacuated from political ecology. What emerges is an account of postcolonial nature that is material and affective, while recognizing

that other-than-human agency is historically situated, emerging through specific channels. At the same time, a more-than-human ethnography recovers a politics of nature that is inexorably enmeshed with the dynamics of power, where bodies are redistributed for purposes of generating profit while unevenly distributing loss.

This book's commitments of working between field and archive, ethnography and ethology, are further expounded in chapter 2 ("The Slow Violence of Infrastructure"), which reads a Plantationocene through its infrastructure and vice versa. A central theme of writing on the Anthropocene pertains to the social, political, and economic effects of infrastructure. Picking up from the archival history of elephant conservation narrated above, I attend to the ecological consequences of populist agitations against colonial underdevelopment that Assam witnessed in the 1970s and 1980s. Mass political resistance to what was perceived as a form of neocolonialism by the Indian state and big bourgeoisie later developed into full-blown secessionist militancy. Infrastructure was a central pivot around which much of the demands of the Assam Movement—as the agitation was called—were organized. Later endeavors to meet these demands had cascading repercussions, conditioning habitability for both elephants and people. These repercussions manifest in the form of a slow violence upon the landscape's denizens, a violence that is gradual, accretive, and often out of sight, but not to those exposed to its harms.[47] By addressing ecological and political effects of infrastructure, the chapter develops a wider infrastructural ontology attentive to the travails of a Plantationocene's present and past. Such an ontology, the chapter argues, enables alternate readings of how infrastructures condition the ambit of human and other-than-human life, foregrounding questions of postcolonial history and livability sometimes occluded by interdisciplinary fascinations with infrastructure in the Anthropocene.

Chapter 3 ("Material Politics") examines relations between elephants and the Adivasi community in greater depth. Attending to uncanny and unexpected ways in which alcohol mediates relations between people and elephants, the chapter specifies a material politics of a Plantationocene. There has been a flurry of scholarship on the politics of matter in the Anthropocene, influenced by neovitalist and new materialist approaches.[48] These approaches strive to take matter seriously, not just as raw materials or commodities, but as forces that act and as potentials that direct sociopolitical outcomes. While it is tempting to see the rise of particular materials and the often toxic ecologies they create as outcomes of the Anthropocene, close attention to the

history of how particular materials are produced points to other explanations. The chapter shows how plantation logics and a necropolitics of aiming to profit from the expenditure of Adivasi lives shapes the ways in which materials, in this instance alcohol, have agency in contemporary ecologies.

In lieu of a new materialist politics of matter, this chapter develops a material politics, where the actions of materials depend on their qualities rather than properties, where agency is configured historically and its expression is contingent upon regulation and practices of use. Matter and materials might seem synonymous to the reader, but I draw some crucial distinctions. Accounts of matter, particularly those espoused by new materialists, emphasize the property of things, residing within them and expressing themselves relationally. Materials, on the other hand, index qualities. The latter are continually produced and dissipated as materials cross osmotic bodies and leach into their surroundings.[49] Tracking materials through a more-than-human ethnography expands this book's wider argument that planetary transformations are situated and grounded events that do not affect *anthropos* as a whole but unevenly and unequally distribute harms.

To further develop a more-than-human ethnography attentive to transversal relations, the book then turns to vegetal life and the ways in which it forges habitability in the landscape (chapter 4, "Accumulation by Plantation"). The violence that followed the Assam Movement had a range of ecological repercussions, beyond those generated by infrastructure. Effects included mass deforestation in the region: an extralegal exploitation of resource frontiers that was to have devastating consequences for both elephants and the Adivasi community. Deforestation fostered the spread of *Mikania*, a nonnative plant that smothered forestry plantations and put tea estates out of production. Coupled with violent land grabs, deforestation set the stage for the further expansion of tea. I term this dynamic accumulation by plantation, a contingent, extralegal form of accumulation in which enrolling the vegetal agencies and attributes of plants also plays a critical role. Vegetal geographies and the dynamic of accumulation by plantation bring a whole raft of agencies and beings into specifying a Plantationocene and show how plantation logics are reproduced through heterogeneous pathways and at a number of scales.

The expansion of infrastructure and tea estates during the turn of the millennium depleted elephant habitat. In response, what has emerged is a new model of conservation, one that shifts from the diagram of enclosure, which is about governing populations within a reserve, to the diagram

of connectivity that is about regulating mobility and modulating flows. Chapter 5 ("The Diagram of Connectivity") thus tracks this emergent paradigm of conservation in a Plantationocene, attending to its political and ecological consequences. Connectivity arises through conjunctions between biogeographic science, imperatives of conservation nongovernmental organizations (NGOs), and actions of the postcolonial state. It materializes in the form of wildlife corridors, some of which are being implemented through expulsions. Connectivity is laden with friction and meets opposition, particularly by those affected by its territorial imperative. The paradigm of connectivity also draws attention to the ways in which conservation is increasingly being scripted in the spatial idiom of infrastructure. The latter becomes a biopolitical technology for governing other-than-human life and, at the same time, draws conservation into ever greater proximities with capitalism. The diagram of connectivity reveals how force fields of power are rearranged, giving rise to new modes of territorial control in a Plantationocene.

Chapter 6 ("Decolonial Cartographies") attends to the ways in which coercive diagrams of a Plantationocene are challenged. Drawing on insights from Adivasi interlocutors, it attends to the ways in which people resist statist logics by invoking spirits, positing other ontologies of animals and an unbounded cartography that unfolds along tracks and trails. These forms of resistance deterritorialize colonial binaries and plantation logics, sometimes beneath the threshold of detectability, and are expressions of people's agency in a milieu of dispossession. Decolonial cartographies, I argue, point to world-making practices that generate other ways of dwelling alongside elephants and amid plantations, just as they brim with the potential of altering what it means to inhabit a Plantationocene. Together, these chapters draw attention to alternate ways of specifying planetary transformations and of understanding the politics of livability and dynamics of life on an altered planet. But to understand the wider importance and salience of this foray into the worlds of elephants and people, we might pause and ask: Why not the Anthropocene?

NOTES

Introduction

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1 Also see Münster, "Lantana Invades Teak Plantations and Turns Elephants Violent."

2 Haraway, "Anthropocene, Capitalocene," 48; Aikens et al., "South to the Plantationocene"; Wolford, "The Plantationocene"; Davis et al., "Anthropocene, Capitalocene."

3 Mann, *Progress Report of Forest Administration in the Province of Assam for the Year 1874–75*; Handique, *British Forest Policy in Assam*.

4 Gustav Mann, cited in Saikia, *Forests and Ecological History of Assam*, 54.

5 Saikia, *Forests and Ecological History of Assam*.

6 Deleuze, *Foucault*.

7 Campbell, "Notes on the Mode of Capture."

8 "Elephant Hunting in Assam," 1.

9 Hunter, *A Statistical Account of Assam*.

10 "Elephant Hunting in Assam," 1.

11 *Annual Report on the Administration of Land Revenue*.

12 Elephant Preservation Act, 1879.

13 Nongbri, "Elephant Hunting in Late 19th Century Northeast India."

14 See Ingold, *Being Alive*.

15 Saikia, *Jungles, Reserves, Wildlife*.

16 Deleuze, *Foucault*, 44.

17 Sukumar, *The Asian Elephant*.

18 Sukumar, "Ecology of the Asian Elephant in Southern India."

19 "The Deputy Commissioner of Durrang . . ."; "Damages by Rogue Elephants"; "A Rogue Elephant."

20 "A Wild Elephant," 5.

21 "Wild Elephants in Assam."

22 Milroy, *Progress Report of Forest Administration in the Province of Assam for the Year 1934–35*, 22.

23 Milroy, *Progress Report of Forest Administration in the Province of Assam for the Year 1935–36*, 16.

24 Bates et al., "Elephants Classify Human Ethnic Groups."

25 Nicholls, *Assam Shikari*, 76–77.

26 Nicholls, *Assam Shikari*, 102.

27 Srinivasaiah et al., "All-Male Groups in Asian Elephants."

28 Srinivasaiah et al., "All-Male Groups in Asian Elephants."

29 Nicholls, *Assam Shikari*, 13.

30 Behal, *One Hundred Years of Servitude*.

31 Allen, *Assam District Gazetteers.*

32 Allen, *Assam District Gazetteers*, 137.

33 At this juncture, it might be helpful to clarify the use of the terms *nonhuman*, *other-than-human*, *posthuman*, and *more-than-human* that populate this text. *Nonhuman* is usually deployed to refer to a range of bodies—whether plants, animals, or spirits—that are not human. However, the prefix *non* represents a lack, an inadequacy that comes with not being human. Following Mathilda Rosengren, I prefer using the term *other-than-human*, for *other* indexes different capabilities and differentiated capacities (Rosengren, "Wastelands of Difference?"). *More-than-human*, on the other hand, is about temporalities, spaces, and processes in excess of the human or that do not always have the human at the center of their assembly. While the term *posthuman* seems analogous, *more-than-human* conjures a different kind of historicity. It does not come after the human, as

indicated by the prefix *post*. Rather, *more-than-human* pushes "hybridity back in time," indicating how the human has always been "a work in progress" (Whatmore, "Humanism's Excess," 1361).

34 Paramasivan, *Progress Report of Forest Administration in the State of Assam for the Year 1950–51*.

35 Payne, *Silent Thunder*.

36 O'Connell-Rodwell, "Keeping an 'Ear' to the Ground."

37 For a helpful distinction between living with and living alongside, see Latimer, "Being Alongside."

38 Behal, *One Hundred Years of Servitude*; Guha, *Planter Raj to Swaraj*.

39 Kalam et al., "Lethal Fence Electrocution."

40 Gureja et al., *Ganesha to Bin Laden*, viii.

41 Sukumar, *The Living Elephants*; Moss, *Elephant Memories*.

42 McComb et al., "Leadership in Elephants."

43 Gureja et al., *Ganesha to Bin Laden*.

44 I develop the term *plantation multiple* by drawing from Annemarie Mol's articulation of "the body multiple," which refers to the plural ways a body is articulated by different practices, but in a manner that is not fragmented into being many (Mol, *The Body Multiple*). On plantation logics, see McKittrick, "Plantation Futures."

45 See Wolford, "The Plantationocene"; Gandy, "An Arkansas Parable for the Anthropocene"; Davis et al., "Anthropocene, Capitalocene, . . . Plantationocene?"

46 Cf. Kirksey and Helmreich, "The Emergence of Multispecies Ethnography." On "more-than-human ethnography," see Barua, *Lively Cities*.

47 Nixon, *Slow Violence and the Environmentalism of the Poor*.

48 Coole and Frost, "Introducing the New Materialisms"; Bennett, *Vibrant Matter*.

49 Ingold, *Being Alive*.

1. Plantationocene

1 Saikia, *Forests and Ecological History of Assam*.

2 Saikia, "Mosquitoes, Malaria, and Malnutrition"; Behal, *One Hundred Years of Servitude*; Guha, *Planter Raj to Swaraj*.