

INTRODUCTION

Naming the Beast—Exploring the Otherwise ·

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Concepts of civilization and progress have long been intertwined with the ways people relate to animals and plants, and domestication has been integral to them. Since the nineteenth century, the idea that civilization can be traced to a particular place and time has been central to popular and scholarly imaginaries. As the story goes, civilization emerged from a specific shift in landscape practices, from hunting to husbandry, from gathering to farming. The most studied and discussed period of transition, called the Neolithic Revolution, occurred in the Middle East about ten thousand years ago. This was the transformative moment when human beings allegedly stopped being passively subject to nature and started to be subjects who exerted mastery over it (see, for example, Childe and Clark 1946). Humans cultured themselves by cultivating others, through the domestication of animals and plants. With domestication came a surplus that allowed, but also depended on, larger human settlements to herd the animals, to till the soil, to plant, and to harvest. This, in turn, paved the way for human population growth, division of labor, subjugation of women, social stratification, private property, and state formation. In short, domestication is framed as that which underpins a seemingly inevitable historical road toward “the world as we know it.”

This sweeping narrative is compelling and easy to grasp. It is an origin story that explains and orders through binary coupling: the civilized from the sav-

age, the domestic from the wild, progress from regress. Its impact is profound and far from innocent. Closely intertwined with racial and gender hierarchies, colonialism, and the rise of industrial agriculture, this Euro-American story and its many variants (more below) have shaped the worlds we inhabit, as well as our modes of cohabiting with fellow beings. They have sustained and justified biosocial relations that are now hegemonic, such as sedentary agriculture, private property, coercive husbandry, and extractive industries. Positioning Western ways of life as the pinnacle of civilization, domestication narratives have also justified massive interventions from the colonial expansion to the Green Revolution, irreversibly shaping human as well as more-than-human worlds. Hence, the stories told about domestication have served to naturalize and justify a specific and dominant way of life, and they have become political tools in their own right.

As ordering devices, domestication narratives are powerful, because they do not merely classify and divide but also sequence. The categories of “civilized” and “domesticated” are underpinned by stories of domestication that link the Neolithic to the present. The idea that humans began to actively cultivate animals and plants thousands of years ago accentuated and solidified the conceptual separation between culture and nature, offering a tool for ordering people and practices, historically as well as today. The Neolithic Revolution narrative and its various mutations are examples of how classifications are embedded in time: this narrative depicts a watershed historical moment, a linear trajectory of human progress, originating from a particular place and spreading from there to other parts of the world through diffusion or warfare, through conquest or “development.” In this way, domestication is integral to the processes through which a Euro-American “natural order of things” emerged.

Why Domestication?

This book explores how situated relations with animals and plants are linked with politics of human difference and, conversely, how politics are historically inscribed in landscapes and seascapes. Seeking to combine insights from multi-species scholarship with critical attention to historically consequential relations of power, we ask: how are the politics of human difference intertwined with plants’ and animals’ lives, with their changing bodies, and with shifting landscape formations? Rather than writing off domestication as a misinformed narrative or an outdated historical tool, we use it as an entry point into some of the core political stakes and debates that emerge in relation to multi-

species anthropology. Through engagement with domestication, we show how plants and animals matter to politics of human difference. In short, we suggest that domestication is a set of ideas ripe for revision at precisely this historical moment.

“Naming the Beast,” the first part of this introduction’s title, signals that we wish to draw attention to, describe, and ultimately circumscribe domestication narratives in their popular and scholarly forms: their ubiquitous presence in the public realm, their rhetorical effectiveness, and their gaps and silences. Our argument is that even if singular “Neolithic-to-modern” civilization narratives have long been discredited, they continue to haunt, as they speak to foundational concerns about “who we are” as human beings. Asking how popular domestication narratives obscure and shape practices of other-than-human engagement, our first intervention takes the form of critique. Notions of domestication have had far-reaching consequences for colonial and postcolonial politics, nature management, scientific research, and technologies of control and have underpinned an agro-industrial trajectory that is not only socially and politically unjust but also ecologically unsustainable. It is high time to reconsider such structures in light of unexamined assumptions about domestication. This is important not only because domestication narratives have naturalized the dominant environmental practices that “got us into this mess” but also because a critical examination of domestication involves a questioning of narratives we live by. Hence, our intervention is part of an ongoing “decolonialization of thought” (Viveiros de Castro 2011, 128).

The second part of the introduction’s title, “Exploring the Otherwise,” signals our simultaneous attention to other-than-human practices and relations, both within and beyond the realm conventionally thought of as domestication. Asking how ideas about domestication shape practices of landscape management and human-animal relations, we turn from conceptual critique to ethnographic case studies, and with a specific agenda: seeking out domestication assemblages that are rendered invisible or peripheral by dominant narratives, we explore domestication practices that are thus marginalized, as well as what is commonly seen as the “margins of domestication.”

Marginality (like periphery) is constantly made, enacted by narratives as well as practices. Hence, domestication (like modernity) can be seen as a project that constantly produces its own outsides as well as “outsiders within,” which, in turn, can be mobilized to justify expanding and civilizing efforts heralded through the idiom of domestication. Through ethnographic attention to domestication assemblages that are marginalized, we can show how

multispecies relations become implicated in contexts of colonial expansion, in the making of resource frontiers, and in other efforts associated with progress.

Additionally, thinking domestication through its margins forces us to consider how politics that are justified through idioms of domestication have shaped the margins from which anthropologists conventionally think, such as the nomads, the pastoral, the indigenous, and the remote. Some ethnographic chapters transgress domestication's terrestrial and agricultural biases and seek out practices of domestication that unfold underwater, in air, and in science laboratories. Others challenge the notion of domestication as a spatially bounded practice and draw attention to how culture and the politics of human difference are woven into landscapes and seascapes.

The word "domestication" derives from the Latin *domus*, which in ancient Rome referred to a type of house occupied by the wealthier classes.¹ Dictionary versions link domestication to hearth and home and to the transformation through which something is either converted to domestic use (tamed) or household affairs or made to feel at home (naturalized).² Both terms imply the making of insides and outsides through the erection of boundaries, notably between something that is contained within the house, household, or home and something that is not yet contained within that setting.

Yet rather than looking for domestication exclusively "inside the domus" (assuming the "wild," or the "agrios," is elsewhere), this book's contributors draw attention to its blurry boundaries and messy interfaces. Instead of beginning with Middle Eastern grainfields or European pastures, the chapters in this volume take us to unexpected sites of domestication, including Norwegian fjords, Ifugao villages, Japanese forests, falconry cages in Britain, nomadic settlements in Mongolia, and South African colonial townships, where human-animal and human-plant relations exceed the assumptions mobilized by traditional notions of domestication.

Hence, by decentering traditional domestication *narratives*—and recentering *ongoing practices* of domestication—this collection of ethnographic stories contributes to more nuanced understandings of the many kinds of relations that provide continuity and livelihood for human and animal communities. It also shows the great variety of conditions in which how humans relate transform, and are themselves shaped by, their other-than-human surroundings. It also offers alternative ways of imagining our shared futures. Let us turn to the domestication story, as it is conventionally told.

Naming the Beast: The Neolithic Revolution and the Birth of Civilization

While domestication has indeed been narrated in many ways, some versions of the story have proved more charismatic than others. When, in 1928, archeologist Gordon Childe famously coined the term “Neolithic Revolution,” he was referring to “that revolution whereby man ceased to be purely parasitic and, with the adoption of agriculture and stock-raising, became a creator emancipated from the whims of his environment” (Childe 1928, 2).³ In Childe’s analysis, revolution was hardly a central concept; in fact, he rarely mentioned it in subsequent writings.⁴ But among archeologists and the public, it traveled well, and gradually it became a catchphrase for that Neolithic moment in the Middle East when the history of humanity took a different turn. In this way (and backed by earlier models of unilinear cultural evolution), the Neolithic Revolution came widely to be seen as that watershed moment in which domestication got embedded in time, performing a distinction between the domesticated and the wild, the civilized and the savage.

Childe himself was more concerned with the implication of domestication for the making of Europe. In his books, with popular titles such as *The Dawn of European Civilization* (1925) and *Man Makes Himself* ([1951] 1936), he solidified the idea that progress was a process of enlightenment in which “man” ceased to be a passive prisoner of his environment.⁵ Since then, the story has been retold in several ways, and it has been subject to substantial criticism (see Smith 2001; Cassidy and Mullin 2007; Lien 2015). Yet despite such critique, it retains a remarkably strong hold on scholarly and popular imaginations.

While critiquing such narratives is not going to make them go away, critical analysis still remains a useful endeavor in that it draws attention to how they are crafted, to their rhetorical plot, and to their omissions. Such an exercise can strengthen our awareness of the power of popular tropes, making them less smooth, less self-evident, and more open to queries. We have chosen a popular History Channel documentary, *Mankind: The Story of All of Us*, as a convenient example of how domestication often is recounted.⁶ We focus on the episode “The Birth of Farming,” which is dedicated to the emergence of agriculture and husbandry. The trailer for this episode, readily accessible on YouTube, retells in a remarkable manner the story of the Neolithic Revolution as the route to civilization.⁷ It succinctly illustrates how key tropes of classic domestication narratives configure space, time, and agency and how they serve, in turn, to anchor a story of origin for Euro-Americans. Let us turn to the film.

The trailer opens with a pastoral scene: we see a human hand scattering seeds on barren soil and then a glimpse of a long-haired, olive-skinned woman dispersing them while a male voice-over tells us that “*farming is absolutely revolutionary.*” The voice-over then adds, “*When we discovered how to farm, we suddenly increased the ability of the land to support us.*”⁸ In the subsequent scene, the woman squats in the middle of a golden grainfield that could be located in the Middle East, a region known to host the first archeological traces of farming, while someone threshes a sheaf of wheat. And yet, evoking a universal “we,” the narrator conjures an image of humanity writ large. In this way, the film miraculously presents itself simultaneously as an “origin story” for Euro-Americans and as a “history of mankind.” It presents wheat and corn (maize) as the crops that count, conveniently ignoring, for example, Asian histories of rice cultivation or Melanesian cultivation of yams, as well as those Arctic and semiarid regions where the agricultural nexus portrayed in the film was never an option in the first place.

A subsequent scene portrays black men in loincloths wearing face and body paint. They each hold a long spear while running low across a savanna, as if they are stalking game. Accompanied by the sound of African drums, the voice-over states, “*We were very good at hunting.*” But it also reminds us that in some locations, most big animals had died out. With this shift from hunting to farming, the actors’ faces shift from black African to white Caucasian, subtly locating the former in a distant past. Through this shift, and by positioning this origin story as the “story of all of us,” the film proclaims a notion of domestication that effectively erases those peoples who, by choice or necessity, have relied on other-than-agricultural lifeways, as well as those who have done agriculture differently.

Such erasures help to naturalize and justify Euro-American ideals and present them as universal “goods.” “*Our ancestors,*” the voice-over tells us, “*were natural historians.*” We see the woman examining a stalk of grain, touching the seed head with her fingertips. Soon after, we see a close-up of a germinating seed in plowed soil and a time-lapse shot of its rapid development into a seedling rising toward the light. As an increasingly loud symphonic drumroll ushers in this new agricultural world, the voice-over dramatically declares, “*This is the beginning of civilization.*”

The scene then shifts to a monocrop cornfield, husks revealing an ear of corn with perfectly symmetrical deep yellow kernels. The voice-over continues: “*It is the seed from which everything grows. From the first crop to the notion of*

property. Nation states . . . cities, empires. It is the roots, quite literally of all society." The accompanying visual images tell a tale of the rise of capitalism and the state: A loaf of leavened bread is changing hands at a rustic market. Coins are being counted and tallied in a ledger book. And then the final image: an animated pastoral landscape, with rolling fields of grain interspersed with patches of green forest, digitally designed so that one literally sees the expansion of cultivated fields like a yellow blanket quickly enveloping most of the terrain.

This final scene brings the point home. Ignoring the often-forced settlement of hunting and gathering peoples by agricultural states (and the formers' resistance), it naturalizes the spatial spread of a singular mode of cultivation: it converts all places into a homogenous landscape of glittering grain, its golden color a sign of its prosperity. The bounty of these fields has ostensibly led to the now-bountiful world of global capitalism and nation-states. The image naturalizes and portrays a world of increasing convergence and an integrated future—a common "modernity" brought into being by farming.

THE HUMAN HAND

The "we" of domestication stories is strongly agential: it is a "we" who discovers, a "we" who builds. Farming, here, is a product not merely of serendipity or interspecies coevolution but of a human intentionality rooted in rational thought. The human hand that scatters the seeds is not an impulsive one but one linked to a thinking being. Agriculture is portrayed as the turning point that changes us from crouched hunters into modern city dwellers. Collapsing thousands of years of multispecies co-evolution into a sequenced tale of necessity, the trailer highlights human strategic action as the key to progress: "*We had to come up with better tools, better houses, to protect our land, to make new materials and so forth. We had new plants to use, we had new plants to grow, we started to develop organized society.*" This emphasis on human intentionality and agency resonates with the idea that through farming, "man makes himself" (cf. Childe's book title 1946). No longer subject to the whims of nature, he has become a subject who acts on a world at his fingertips; he is a man in control.

The video then cuts to a scene of a hut with a simple fence. The people in the scene, now white-skinned with European facial features, perform a diversity of tasks: sorting grain, digging fence postholes, harvesting crop, and overseeing others. The symbol of the human hand is particularly important here. *Homo* hands—with their opposable thumbs—are one of the traits assumed to make humans superior to other animals. We can grasp the world—both to make it and to apprehend it—because we can physically manipulate objects with ease.

With manual agricultural skills come a host of other changes: “*We had to have a hierarchical system that is going to have somebody in charge, to make sure that things are done.*” Humans are positioned in the “driver’s seat,” capable of controlling their own destiny through actions based on careful cognition. This resonates with common themes in anthropology, in which “man” as the “individualized agent” holds the power to act upon Nature, which is merely acted upon (see, e.g., Descola 2012, 459). Animals, plants, and landscapes are rendered passive, located outside the history of progress, at the mercy of the human hand that conquers, transforms, utilizes, or tames.

PROGRESS TRAJECTORIES

This at once global and Euro-American “we” allows for another conceptual move: the naturalization of “Progress.” In the trailer, we see images of a stone wall, a fast, digitized unfurling of what resembles the Great Wall of China, rolling across barren lands while the voice-over states, “*Farming is the most important ingredient in human civilization.*” Domestication stories temporalize as much as they spatialize: farming dominates and expands because it is “more advanced” and “ahead” of other lifeways. Agriculture is a sign of development and improvement—of moving from simple, primitive ways of being to more complex ones, with task specialization, social stratification, and governments capable of large-scale planning.

Naturalizing agriculture as universal progress is underpinned by notions of necessity that, in turn, are used to justify human conflict and warfare. Once the trailer has settled the need to have somebody in charge, another voice continues: “*Farmers are invested in land. Inevitably, if there is more than one person farming, this brings them into conflict with one another.*” Explosively the scene shifts again; the music reverts to African drums, and we see men running, clubs in hand, yelling war cries and aiming at each other with bow and arrow. The voice continues: “*Warfare follows farming as a natural sequence.*” The explanation is simple: “*You have stuff to lose, you have vested interests, and we had to protect other things to protect that.*”

The trailer does not make the shift from protecting one’s own land to claiming that of others explicit, but its juxtaposition of images and voice-over, from the animated rollout of a golden blanket of corn to the conjunction of farming and warfare as a natural sequence, evokes a strong message: nonagricultural people are temporally “behind” and immature, while agricultural societies represent the pinnacle of mature human civilization, inevitably expansive, violent, and “naturally” superior. In this way, the story of domestication provides moral justification for colonial and neocolonial projects that “help” so-called

underdeveloped peoples, nonagriculturalists, and nomads to attain a higher level of being by teaching them how to approximate Euro-American ideals and agricultural forms.

The trailer described above is a commercial product, made simple and seductive to draw attention to a popular series on the History Channel. Our criticism lies not with the trailer as such. Rather, we seek to draw attention to widespread assumptions that make trailers like this effective. The notion of the Neolithic Revolution is well known. Tropes of such standard domestication stories have shaped both scholarly and popular imaginations across Euro-America and beyond and have served as what Hayden White has called “a practical past”—a popular history that aims to bolster a version of the present and provide guides for futures (2014). The trailer illustrates such tropes, and in this way, it helps us in “Naming the Beast.” Our first concern is simply to note its pervasiveness and popular appeal. Our second concern is to consider the work it does toward performing domestication in a particular manner. Through tales like “the birth of farming,” we argue that domestication narratives have sustained, justified, and made legible biosocial relations (such as sedentary agriculture, private property, coercive husbandry, and extractive industries) that have had material effects on human and nonhuman lives. These relations have helped to prop up troubling human social formations—including racial hierarchies and the domination of women, patriarchal family structures, reproductive control, naturalized notions of European kinship, and concepts of the household and the domestic—that underpin nation-states as well as imperial colonizing projects. Domestication narratives have also shaped the ways that people have crafted landscapes and forged relations with animals and plants.

Such narratives have also informed scholarly understandings of what domestication is and underpinned approaches to domestication that now seem too narrow. Consider, for example, the much-cited definition of domestication by archeologist Juliet Clutton-Brock, in which domesticated animals are “bred in captivity for purposes of subsistence or profit, in a human community that maintains complete mastery of its breeding, organization of territory and food supply” (Clutton-Brock 1994, 26).⁹ “Complete mastery” is a tall order, and as we shall see, it is one that is rarely if ever achieved in interspecies relations, as many studies of people who work closely with animals show (see, for example, Anneberg and Varst, this volume; Lien 2015; Bjørkdahl and Druglitrø 2016; Cassidy and Mullin 2007). And yet, this is the assumption that has been repeatedly evoked in anthropological studies of domestication. Why do we keep forgetting that human lives, bodies, and practices are always deeply entangled

other-than-human relations? How could we ignore that culture and politics are lively assemblages in which nonhuman species play key roles? Let us turn to anthropology.

Anthropology and the (Un)making of Domestication Narratives

Anthropologists are well positioned to reconsider concepts of domestication, because their discipline played an instrumental role in hardening classic domestication-as-progress narratives in the first place. Nineteenth-century social scientists, inspired by Scottish Enlightenment thinkers, were the first to explicitly develop the foundations for domestication narratives. Many of these were prominent early anthropologists. Seeking universal laws, Herbert Spencer, Lewis Henry Morgan, and Edward Tylor each worked to formulate versions of what is now called unilinear cultural evolution, a paradigm that included the proposition that cultures move to a higher level of civilization when they adopt settled agriculture. This is *Order into History*: the sequencing of human difference into a single evolutionary story.¹⁰

These were not fringe ideas: Edward B. Tylor, for example, is considered one of the founders of social and cultural anthropology and provided the definition of culture that would become the reference point for anthropology as a scholarly discipline (i.e., Boskovic 2004, 524). For Tylor, culture was singular, not plural, and the first sentence of the book *Primitive Culture* states: “Culture, or Civilization, taken in its wide ethnographic sense, is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society” (Tylor 1994 [1871], 1). He approached culture as the primary determinant of civilization and held that, through the study of “culture in all its aspects, one could determine the stages that ‘mankind’ had to pass through in its long quest towards ‘civilization’” (Boskovic 2004, 524). Spencer, whose ideas of evolutionary progression from simple to complex society have been equally influential, has been heralded as “the single most famous European intellectual in the closing decades of the nineteenth century” (see, for example, Eriksen and Nielsen 2001, 37). Morgan’s work, which included explicit attention to the domestication of plants and grains, both garnered attention in its own right and inspired Marx and Engels, the latter of whom drew on Morgan’s texts when he drafted *The Origin of the Family, Private Property, and the State* (1884 [1972]). Morgan’s work also inspired Childe (McNairn 1980).

Natural science narratives at once drew on and strengthened such story-

telling practices. The biological “tree of life,” which typically placed modern (white) man at its crown, embodied a logical structure similar to the era’s domestication narratives.¹¹ In this transdisciplinary moment, ideas of hierarchy, evolution, pedigree, and development traveled between nascent fields such as anthropology and biology, reinforcing these emerging trends and creating a new paradigm of “commonsense.”

By the turn of the twentieth century, unilinear cultural evolution had “gone viral” and become a dominant trope, not only among Euro-American intellectuals but also among a variety of publics. Some anthropologists, such as Franz Boas, perceived its dangers and tried to contest its most pernicious parts. He argued against the notion of a singular teleological History and for multiple histories unfolding in different places. Cultural difference, he argued, was spatial, not temporal. People in different locales were equally “developed” to their own unique contexts. No people or way or life was more advanced than any other. While Boas’ work helped to temper some of the more pernicious racism in the social sciences, it did not dislodge evolutionary logics. Both within and beyond the academy, stories that focused on developmental sequencing in general—and on the importance of domestication in particular—came to be central to disciplinary imaginations. This centrality was solidified through concepts like the “Neolithic Revolution,” which underpins the idea that man is no longer a passive prisoner of his environment’s affordances (cf. Childe) but is capable of shaping a world of his own.

Among Boas’ concerns was thinking human bodies, their environments, and their social practices *together*. In light of his emphasis on the plasticity of human bodies and the significance of environmental exposures in human development, one might argue that his interventions signaled an early biosocial turn in anthropology (Pálsson 2016, 7). Indeed, canonical anthropological monographs of the twentieth century reflect such concern for corporeal embeddedness and cross boundaries between forms of anthropology that are now held separate, such as physical, cultural, and linguistic forms. Such work posed questions of corporeal coconstitution, such as how human and animal bodies were intertwined through relations of domestication (Evans-Pritchard 1940; Lienhardt 1961; Rappaport 1967).

In the meantime, archeologists considered how domestication might permanently alter bodily features, not only for animals but also for humans (see Leach 2003).¹² Hence, they proposed that physiognomic differences between human groups across the world reflected their adaptation to the environment and, more specifically, whether they were cultivators and/or keepers of domesticated animals.¹³ However, the abuse of physical anthropology by the eugenics

movement and the atrocities of World War II brought an end to such speculations regarding the connections between human bodies and their relations to animals and plants and has led to what archaeologist Helen Leach has referred to as the “virtual disappearance of this theory of human domestication from post-1950s anthropological writings” (Leach 2003). Along with this disappearance, and as interrelations between landscapes and social and bodily practices were replaced by other concerns (e.g., utility, value, symbol), cross-field conversations among social/cultural anthropology, physical anthropology, and archeology fell silent, too.

By the 1950s, the ontological underpinning of what came to be known as social and cultural anthropology was more or less in place: a notion of culture divorced from physical bodies and evolution. In line with this nonevolutionary program, twentieth-century work on domestication in social and cultural anthropology has highlighted the human side of human-animal relations, focusing on animals as property, on their utility for humans, or on their metaphoric or symbolic meaning (cf. Leach 1964; Lévi-Strauss 1966; see also Cassidy and Mullin 2007).¹⁴ While twentieth-century anthropology produced a number of detailed ethnographic accounts of animal agency, mutualism, and codevelopment within human-animal relations, such descriptions did not pull the materialities of these relations into major theoretical debates in the discipline.¹⁵ Ethnographic descriptions of animal agency and mutualism in human-animal relations, such as that of Evans Pritchard, the Dyson-Hudsons, Lienhardt, Rappaport, or Thompson (see also Fijn, this volume) *could have been* mobilized as a challenge to (then) hegemonic domestication narratives. Instead, they remained secondary to what were held to be these books’ main arguments: issues of human social organization and political structure.

We may thus conclude that throughout the latter half of the twentieth century, the Anthropos of anthropology was *not* a figure whose bodily features were shaped by domestication practices, as Boas once suggested (Boas 1911). Rather, it was a figure for whom the body is more or less a given. If her body is malleable, it is through the agency of the human as a thinking and acting subject, rather than the outcome of ancestral practices. The body of social and cultural anthropology is a recipient body that can be acted upon, rather than a dynamic site of interspecies mutuality and evolutionary change (see also Lien 2015, 13). Consequently, until recently, only a handful of scholars engaged in research on the multispecies materialities of domestication. Examples of those who did include Tim Ingold, whose work (see for example Ingold 2000) has challenged standard archaeological and biological definitions of domestication and their emphasis on mastery and control, and David Anderson, who

has demonstrated that northern hunters and gatherers, despite their exclusion from agrarian foundational domestication narratives, have maintained complex correlations with reindeer and other animals for more than five thousand years (Anderson 2000).¹⁶ Focusing on Arctic landscapes as cultivated landscapes (rather than remote frontiers of civilization), such contributions draw attention to how such domestication practices involve fine-tuned engagement in the landscape and how human-animal relations imply mutual dependence, dialogue, and trust rather than simplistic forms of control and confinement (Anderson 2000, 2004; see also Willerslev 2008; Losey 2011). Such work shows the promise of what we call “marginal domestications”—the ability of attention to domestication outside of grain-state stories to interrupt classic domestication narratives (see also Lien, this volume). While these authors draw on ethnographic examples from the Arctic, Rebecca Cassidy and Molly Mullin’s edited collection *Where the Wild Things Are Now* (2007) widens the scope even more, as they engage the concept of domestication in ethnographic case studies that involve monkeys, lions, farmed salmon, and laboratory mice. These studies have shown how the concept of domestication may yield insight beyond its conventional realms and have demonstrated, above all, that relations of domestication are not always captured by classic notions of human mastery and control. We build on such insights while we take this intervention one step further, through heightened attention to the politics of interspecies relations, as well as the broader implications for the politics of human difference.

In doing so, we draw upon literature that reflects renewed attention to more-than-human relations and to the liveliness of materials, signaling a (new) porosity of disciplinary boundaries. In recent years, literatures on human-nonhuman coconstitution have exploded (see, e.g., Despret 2013; Stépanoff 2012). Terms such as “multispecies ethnography” (Kirksey and Helmreich 2010), “biosociality” (Ingold and Pálsson 2013), “becoming-with” (Haraway 2008), and “more-than-human sociality” (Tsing 2014, 2015) gesture toward a shared commitment to less anthropocentric approaches and framings that permit discussion of human evolution and bodily changes. This volume draws on such insights and explores their political purchase. By foregrounding domestication, we contribute not only to the lively field of more-than-human ethnographic analyses but also to an understanding of how the shifting politics of human difference are profoundly shaped by the legacies of unilinear evolution, domestication narratives, and exclusionary notions of civilization.

The Neolithic Revolution Is Not What It Used to Be

Our approaches to domestication are strongly indebted to insights from archeology, a discipline that has had to deal directly with the troubling afterlives of the primacy of the Neolithic Revolution and its framings of civilizational progress. For several years, many archeologists have been critical of the shortcomings of the domestication narrative, and it is perhaps they who have most consistently challenged the term “domestication.” Archeologists Diane Gifford-Gonzalez and Olivier Hanotte (2011) have suggested, for example, that a preoccupation with domestication as an event, or an intention, has produced a lack of curiosity about evolutionary change in domesticated species *after* their first appearance. Such critical reflections resonate with ours and are part of the broader reconsideration of domestication within which our intervention is situated.

With a renewed focus on mutualism and coevolution, the role of nonhuman agency in processes of domestication has been revived (Leach 2003; Gifford-Gonzalez and Hanotte 2011).¹⁷ Equipped with ever-more-sophisticated techniques for reading bones, pots, and pollen (such as genetics and soil analysis), archeologists have scrutinized the role of domestication as a temporal ordering device and have produced new forms of evidence and different imagery for thinking about how domestication evolved. One of the most important insights is that agriculture was not a sudden invention but a long coevolutionary, cumulative process marked by changes in which partner populations of humans and nonhumans became increasingly interdependent (Zeder, Bradley et al. 2006, 139; see also Harlan 1995). Archeologists’ main critiques of domestication narratives, which also underpin our own, may be summarized as follows:

- 1 Domestication is gradual. Acknowledging that the so-called Neolithic Revolution was not a sudden event, some archeologists now prefer the term *neolithisation* to indicate a period in the Near East of at least four to five thousand years when numerous new human-animal-plant regimes occurred (Vigne 2011, 178). Many archeologists also question the dualist temporality of before and after that the very notion of the revolution creates. Hence, they bring attention to what Bruce Smith calls the definitional and developmental “no-man’s land” that stretches between hunter-gatherers, on the one hand, and agriculturalists, on the other, a territory that turns out to be “surprisingly large and quite diverse” and that is also difficult to “describe in even the simplest conceptual or developmental term” (Smith 2001, 2).¹⁸

2. Domestication is not always unidirectional. As this “no-man’s land” gets exposed, it turns out not only that the “revolution” took a very long time but also that the historical trajectory of domestication can involve a series of movements back and forth between different food procuring strategies, with shifting emphasis and combination (Gifford-Gonzalez and Hanotte 2011; see also Scott 2011). This is supported by contemporary ethnographic studies of human-animal relations that document how domestication is not a one-way street. Focusing on reindeer among the Evenki, David Anderson details how the collapse of the Soviet state made previously domesticated reindeer “wild,” as domesticated herds joined the wild flocks passing by, but also how some Siberian reindeer herding peoples habitually breed in some wild animals (Anderson 2000). Similarly, as Natasha Fijn has argued with reference to the Mongolian horses known as Takhi, wild and domestic should be thought of as fluid states in which there can be considerable crossover, or interbreeding, between the two (Fijn 2011, 2015). Such instances complicate distinctions between wild and domestic and remind us that even though there are many examples of husbandry animals that are genetically altered in ways that make a “return to the wild” unimaginable (a feral poodle could hardly become a wolf), domestication is not always a unidirectional process.¹⁹
3. Domestication is multiple. Archeological evidence shows that domestication happened independently in several different places and had many different outcomes (Zeder, Bradley et al. 2006; Vigne 2011). Hence, despite its prominence in archeological literature and in popular accounts, the story of the Neolithic Revolution in the Middle East is, in fact, only one of many stories of how people began to cultivate specific crops or raise husbandry animals. Vigne concludes that “very different societies were initiating similar ideas in completely different parts of the world . . . during the same relatively short period of time” (Vigne 2011, 174). One of the sites in which domestication occurred is in Southern Amazonia, where manioc cultivation began six to eight thousand years ago (Zeder, Bradley et al. 2006). Other examples are China (pig domestication ca. 8,000 years ago), Kazakhstan (horse domestication ca. 5,000 years ago; Vigne 2011, 174), and highland South America (llama domestication). Often, these relations are of great cultural significance. Archeological excavations of dog burial sites in Siberia, for example, suggest that dogs were known as distinct persons, requiring mortuary rites similar to those of humans (Losey

- 2011). Such findings remind us that domestication processes are indeed multifaceted and situated phenomena with many different historical trajectories.
- 4 Domestication is a mutual process. While studies of domestication have traditionally located humans as the active agent of change, rendering animals, plants, and environmental surroundings as merely acted upon, most scholars today agree that domestication is, at least, a two-way relationship (Russell 2002; Leach 2003; Oma 2010; Zeder 2012).²⁰ This implies that both or several parties undergo changes (Leach 2003) in which “each species benefits from the other, in terms of its reproductive success” (Gifford-Gonzalez and Hanotte 2011, 4). However, the relation between mutualism, agency, and human intent remains contested: Vigne, for example, insists that human domestications differ from other episodes of mutualisms to a degree that they are no longer coevolution, because humans, via culture, are “able to modify [their] environment according to long-term predictions, fed by a multi-generation memory of successes and failures and using socialized (i.e., flexible) techniques” (Vigne 2011, 177). Others have pointed out that such assumed one-sidedness is problematic, first, because assumptions about human intent may be overstated and the link between intention and outcome is highly uncertain²¹ and, second, because animals have fears and desires too, some of which may lead them to seek out human shelter or human-made food (Stépanoff 2012, see also Lien, this volume). Most scholars now agree that dog domestication, for example, was initiated by wolves who began to specialize in feeding within human areas on the remains of leftover meals, particularly hunted animals. These wolves eventually evolved to have less fear of humans, allowing people to more closely interact with them, and human intervention in their breeding did not occur until long after this initial colonization of the human niche by these animals (Coppinger and Coppinger 2001; Zeder 2012). Additionally, in what is called “the social turn” in the life sciences (Meloni 2014) there is a diversity of stories of cultivation practices in nonhuman cultures, such as ants, that go back hundreds of millions of years, indicating that when it comes to gardening, we humans are “late to the game” (Hartigan 2015, 37).
 - 5 Domestication involves transformations that are unintentional and unforeseen. While some archeologists insist that human intent is the distinguishing feature that makes human domestication different

from coevolution between nonhuman species, others take a different view. Archeologist Helen Leach (2007) has argued that although the shifting selective pressures associated with domestication processes have caused major transformations for animals, plants, and people, these selection pressures were *not* under humans' conscious control. Rather, she argues that for most of the time since domestication processes began, "humans have not understood the mechanisms sufficiently to foresee the consequences for the plants and animals that became their focus, let alone appreciate how they themselves have changed" (Leach 2007, 95). At stake here is the relation between human intentions and material effects. There is no doubt that humans have a remarkable capacity for what Vigne calls multigenerational memory of failures and successes and that societies indeed remember (Connerton 1989), making "trial and failure" effective in achieving long-term intended outcomes. Some forms of transformations associated with domestication practices obviously rely on this. But it is also true that many of the effects associated with human domestication practices are unintended. Zoonoses, that is, diseases that spread between animals and humans, were clearly not part of the plan, even if they brought some obvious advantages for colonial empires (Crosby 1986). The contribution of methane gas from cattle in industrial feedlots to climate change is another unintended outcome of current agro-industrial domestication practices, which can hardly be attributed to human intentionality. This effect is significant and a reminder of the lasting and irreversible human impact on the atmosphere and the earth itself, coined as the Anthropocene, a process that, according to some scholars, began with the Neolithic Revolution (Swanson 2016). In other words, while the alleged salience of human regimes of control in relation to domestication practices is not entirely wrong, it is important to keep in mind that such control is only partially achieved in relation to domestication practices in the present and consistently fails to predict the impact of such practices in the future. Put differently, conscious human efforts to exert some kind of control in relation to specific multispecies trajectories should not be conflated with control as an operative mechanism or an outcome in relations of domestication. This calls for a more nuanced approach to control in human-animal relations, one that does not simply treat control as a defining feature that is either absent or present. Above all, these considerations remind us that stories that evoke hu-

man mastery over nature as a distinctive feature of domestication are usually too narrow and are often simply wrong.

- 6 Domestication is a multispecies relation. Although bilateral relations between humans and other species are often highlighted in the domestication literature, recent contributions to the field tell a more complex story. What they teach us, above all, is how domestication of a single species is associated with a host of transformations that involve many other species too, as well as landscapes elsewhere. Environmental historians have shown, for example, how livestock (cattle and sheep) have played a prominent role in early settlers' conquest of North America (Anderson 2004, 152) and Australia (Crosby 1986), partly due to how their presence irreversibly transformed the vegetation and hence the entire colonial landscape. Archeologists have described the rise in infectious diseases associated with the Neolithic Revolution as the first out of three major epidemiological transitions (Barrett, Kuzawa et al. 1998). Alluding to the emergence of zoonoses in the early phases of animal domestication, James Scott has described the microbiological changes associated with contemporary agro-industrial sites as "late neo-lithic multispecies resettlement camps" (Scott 2011, 206), and aquaculture is clearly an example of a similar dynamic (Lien 2017; Law and Lien 2013). These examples remind us that domestication practices reach far beyond the human-animal dyad and challenge us to think differently about their expansive sites (see also Swanson, this volume).

Archeologists have revisited domestication for more than a decade and contributed to much more nuanced understandings of its practices. But even so, the teleological imagery of domestication as a linear trajectory can appear surprisingly stubborn both within and beyond the discipline. From Morgan's ideas of humankind's evolution from savagery through barbarism to civilization, via Childe's captivating image of cultivation as the "dawn of civilization," to contemporary overviews of pathways to domestication among animals and plants, there are clear continuities. Terms like "stages," "pathways," "travelers," "journey," "progress," and "steps" are commonly used (see, for instance, Leach 2007; Zeder 2012; Larson and Fuller 2014). Although many of these terms are clearly metaphorical, they still reinforce an understanding of domestication as a trajectory, and contribute to the naturalization of domestication as destiny and destination. With the image of a journey, it is *as if animals and humans are on their way somewhere* while also engaging in relational practices of biosocial

becoming that have no prescribed linearity at all.²² This is not meant as a critique of archeology as such (archeologists themselves are obviously often aware of these challenges) but rather as a reflection about how concepts are never innocent and how even with the best intentions, progress imagery continues to haunt. Above all, the example reminds us that the idea of domestication as a temporal trajectory is a powerful trope across the disciplines of archeology and anthropology alike.

What happens when one explores domestication beyond such temporal framings? What else do we notice when domestication is decoupled from ideas of progress and growth? If we acknowledge that domestication is a multiple, mutual, and partly unintentional process, how does this change our framing of domestication as an object of study? And what are the implications for an anthropological understanding of the “Anthropos”? These are questions that the contributions to this volume raise and that we explore in more detail below.

Exploring the Otherwise: Domestication as Relational Practice

The domestication narrative we have laid out above helps to clarify the context into which we write, but our project is not primarily one of critique. Rather, we take the concept of domestication, with all its challenges and problematic narratives, as an invitation to cultivate a broad ethnographic curiosity, asking *what else* might be going on under the radar of its popular and triumphant accounts. This is the work of *exploring the otherwise*, to which we gesture in the second half of this introduction’s title. What, specifically, does this kind of an ethnographic approach contribute to an understanding of domestication? How does it push us to think more carefully about relations between humans and other-than-humans? Embedded in this volume’s ethnographic approach are two important premises: 1) that attention to domestication *practices* must accompany attention to domestication narratives; and 2) that studying domestication from *marginal and atypical sites* may open up different insights than does approaching domestication from its centers. Together, these two ideas make up the approach we call “decentering domestication.”

The following three sections of this book decenter domestication in unique ways. Part 1: Intimate Encounters—Domestication from Within, helps us see the unexpected relations that flourish within relatively recognizable domains of domestication. The chapters in this section draw attention to human-animal dyads in settings where human actions certainly shape animal lives—but not necessarily in expected ways. In the encounters of people and other beings within the bars of cages (Schroer), the boundaries of villages (Remme, Fijn),

the walls of a pig stall (Anneberg and Varst), or makeshift houses made for wild ducks (Lien), relations are radically different from those portrayed by domestication narratives. We find that even in seemingly enclosed spaces, domestication includes complex boundary work, unexpected intimacies, ontological uncertainties, and bodily coconstitution. By tracing the shifting distributions of agency, this section of the volume asks *what agential capacities* humans and other-than-humans come to have within various domestication assemblages.

Rather than approaching domestication as a crude relation of asymmetrical control, several chapters in part I describe its unexpected combinations of cooperation and coercion and of asymmetry and intimacy. Sara Asu Schroer, for example, shows how courtship rituals of falcons in captivity cautiously unfold between birds and their human breeders. To produce offspring “behind bars,” breeders must court falcons on terms that are not their own and that must be constantly negotiated within intense expressions of affection and aggression. Aggression and affection are also present at Danish pig farms, where the pigs themselves come to make unexpected demands on both farmers and animal welfare policies, as described by Inger Anneberg and Mette Vaarst. In this industrial context, human-pig relations are negotiated in material practices, such as the construction of stalls, but this does not preclude an accommodation of agency of the pigs themselves. The distribution of agency among humans and nonhuman animals is uncertain, negotiable, and shifting. Drawing on Bente Sundsvold’s rich ethnography about eider ducks on the Northern Norwegian coast (Sundsvold 2010, 2016), Marianne Elisabeth Lien explores how domestication might be seen as a series of generative and tentative interspecies encounters that defy any assumption about human mastery. Together, the ethnographic cases in this section point to the complexity of domestication relations and the varied forms of agency and subjectivity that emerge within them. They demonstrate that domestication practices require a vast amount of coordination to be sustained and that this coordination often depends on the enrollment and active participation of other-than-humans of many kinds.²³

Part II of this book is titled *Beyond the Farm: Domestication as World-Making*. Here, we widen our focus both spatially and temporally. Through attention to sites and beings not commonly associated with cultivation and confinement, this section pushes us to ask from *where* one might study domestication.

It is well known that practices of domestication produce rippling ecological effects: cattle rearing changes grasslands, while salmon farming requires the harvest of small fish to produce pelleted feed. However, such processes are generally thought of as external to acts of domestication themselves. The chapters

in part 2 place landscape changes at the heart of domestication stories: Here, the “domus”—the scene or site of domestication—is no longer the farm, the pig stall, or the pen. Rather, it is webs of shifting political and ecological relations that weave across the North Pacific Ocean (Swanson), globally connected farms in a remote part of Norway (Hastrup), the air currents of a South African town (Flikke), a series of trout-bearing watersheds (Nustad), and the traveling knowledge practices of a scientific mapping project (Ween and Swanson).

The chapters in this section force us to consider how the *where* of domestication may extend far beyond the farm. Frida Hastrup’s chapter, for example, describes how what appears to be an iconic local apple, “naturally” adapted to the steep hillsides of West Norwegian fjord valleys, is a result of geographical wide-ranging connections: grafting experiments of eighteenth century monks, imported agricultural chemicals, and national government subsidies. To stay rooted, the apples require the mobilization of complex networks of support, their domus extending far beyond the locality from which they supposedly originate. Other chapters in this section (see Nustad, Flikke, and Ween and Swanson) move us away from land-based agriculture altogether, asking how water and air are also subject to practices that might productively be explored as forms of domestication. Questions about the sites and scales of domestication are *analytical* as well as empirical interventions, and many of the authors in this volume show how focusing on unusual scenes of domestication leads to new conceptual insights. Rune Flikke, for example, illustrates how the domestication of air—the taming of smells and atmosphere—was central to colonial conquest in Africa. His analysis, which probes how the planting of eucalypts for sanitary purposes was integral to managing racialized fears of disease within the intimacies of colonial encounters, pushes us to imagine the home-making of settler colonialism in new ways. Rethinking the *where* of domestication also shifts our sense of *who* or *what* is pulled into its relations. The chapters in this section stress that domestication always exceeds dyadic relations between humans and a given species. Definitions of domestication that focus narrowly on the animals and plants that have been intentionally brought under cultivation overlook the many other creatures who find their niches altered, for better or for worse, by domestication practices that may not have targeted them. Heather Anne Swanson’s chapter on the wide-ranging effects of Japanese hatchery-bred salmon on the watershed ecologies of Norton Sound, Alaska, is among those that illustrate how domestication can “go wild” and create unexpected transformations across large swaths of land and sea.

The final chapter of this section is a commentary by Anna Lowenhaupt Tsing that explores the ongoing critical potential of domestication. How, it

asks, can we continue to talk about problems of confinement, control, and domination at the same time that we acknowledge co-constitution? How might attention to traditional forms of domestication—and their profound violences—be a way to keep inequalities in multispecies conversations? What analytical possibilities open if we limit the definition of domestication to the legacies of the European practices that emerged out of the Neolithic Revolution and see the margins in different terms and as something other than domestication? Tsing's chapter is a reminder to consider the possibilities, as well as the political implications—and limitations—that different approaches to domestication entail.

Politics of Domestication

Tsing's intervention reminds us of the always political nature of conversations around domestication. Domestication practices are *ordering devices* that often rank the civilized and the savage at the same time that they reconstitute temporal cycles and spatial choreographies. Ordering devices are effective political tools that often justify interventions in the name of progress, development, and/or modernity. This is exemplified in Lien's account of how postwar ideals of profitable farming and growth sidelined other, more fragile subsistence relations, including those with eider ducks, undermining the robustness that had historically made life possible. Domestication practices are also implicated in naturalizing spatial/cultural territories such as nations and homelands, through scientific and state practices (as described by Ween and Swanson), as well as through negotiations of wildness and belonging in contested sites (as described by Nustad).

Reengaging domestication is thus also a political act. In anthropology and archeology, domestication is an analytical term that has emerged from the civilizational narratives and landscape-making practices of particular European worlds. Given these histories, how might scholars want to engage this term differently?

This volume does not seek a single answer to this question. Rather, it demonstrates how different ethnographic contexts and concerns call out for different analytical and political projects—and thus different approaches to domestication. Some of the scholars in this volume aim to undermine domestication's power to uphold civilized/savage binaries by expanding the definition of domestication to include human-animal relations that have typically been deemed undomesticated. Lien's work exemplifies this approach and resonates

with that of others who work in the Arctic, as it draws attention to unexpected relational intimacies and affordances in landscapes that are otherwise seen as barren or empty (cf. Anderson 2004). If Arctic worlds are shaped by state policies rooted in hegemonic narratives of domestication, then expanding definitions of domestication to make marginal practices more visible is an important mode of challenging those forms of governance.

Other contexts call for other approaches and alert us to how the continued use of a European concept to analyze other worlds might perpetuate the violences of European domination in some situations. Should Ifugao-pig relations necessarily be analyzed through Western categories and terms such as domestication (Remme)? Does the concept of domestication help or hinder our ability to notice the complex relations between people and dogs in places such as Mongolia and Aboriginal Australia (Fijn)? Remme ultimately chooses to expand the concept of domestication to Ifugao practices, while Fijn refuses to do so, instead opting to critique domestication as a European-origin categorization that should not and cannot be expanded to other biosocial worlds.

Tsing, like Fijn, is wary of expanding the concept of domestication; she proposes that anthropologists examine domestication as a particular historical form, rather than use it broadly as a synonym for multispecies relations. Tsing's chapter illustrates how a narrower definition of domestication allows us to better see and critique "the inequalities and intensities of civilization and home" that have been central to projects of patriarchal domination and state control. Several of the chapters in part II of this volume (Flikke, Nustad, and Ween and Swanson) take a similar approach, as they critically examine how colonial and state projects make use of domestication narratives and practices.

The diverse approaches that our volume's chapters display in defining, examining, and writing domestication are central to its overall aim: to illustrate that decentering domestication requires careful consideration not only of human-animal relations but also of the political context and concerns within which those relations are situated. Read as a set, these chapters echo the argument for the book as a whole, as they insist on the importance of reengaging domestication analytically and ethnographically and illustrate the dilemmas, challenges, and strategic choices faced by those who do so. How, in practice, can scholars both "name the beast" and "explore the otherwise"? The following chapters present a range of approaches and partial answers, and we hope that they may also stimulate readers to find their own.

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NOTES

1. Ian Hodder (1993) points out how its root is among the most ancient in the Indo-European world. According to Hodder, “domesticate” is linked to the Latin *domus*, Greek *domos*, Sanskrit *damas*, Old Slavonic *domu*, Old Irish *doim*, and the Indo-European *dom- or dem-* (Hodder 1993:45). Hodder further notes how domestication is associated with common English words such as domicile, dominant, dominus, dome, domain, dame, and tame. (See also Tsing, this volume.)

2. “Domesticate: 1. To convert to domestic uses; tame, 2. To accustom to household life or affairs, 3. To cause to be or feel at home; naturalize, 4. To be domestic.” Source: Webster’s Dictionary (1996).

3. Why “revolution”? For Childe, Karl Marx was a major source of intellectual inspiration, and he “identified with Marxism both emotionally and intellectually” (Trigger 2007). When he wrote this in 1928, we may imagine that the idea of a revolution, for Childe, was a good thing. Hence the adoption of agriculture and husbandry was perhaps, for him, yet another example of an emancipatory moment in which man could rid himself of the shackles of structures that prevented him from reaching his full potential. Childe himself associated this moment with what he calls the “conquest of civilization” (Childe 1928, 2), and it is this idea that seems to be his leitmotif.

4. In fact, even in this citation, he did not put the two words “Neolithic” and “revolution” next to each other. As the word “revolution” hardly ever appears in Childe’s own writings (nor in his indexes), it is perhaps a bit unfair that the term “Neolithic Revolution” is so often attributed to him.

5. When Childe wrote this, in the 1920s, man (not woman) was still the appropriate

figure vested with the power to bring progress (for a reappraisal of Childe's contribution, see Tsing, this volume).

6. The documentary series aired in the United States in 2013 and can be viewed online at <http://www.history.com/shows/mankind-the-story-of-all-of-us> (uploaded September 12, 2016).

7. See <https://www.youtube.com/watch?v=bhzQFIZuNFY>.

8. Italicized to indicate emphasis in the voice.

9. For a critique, see Cassidy and Mullin (2007).

10. See Foucault (1970).

11. See Ernst Haeckel's "Tree of Life," which he titled "Pedigree of Man" (1879).

12. This idea was also proposed by Darwin, for whom humans, like animals and plants, were subject to natural selection "while at the same time unlike them they themselves practice two other forms of selection, 'unconscious' and 'conscious'" (Leach 2007, 74, citing Darwin 1868 1:214).

13. See Leach (2007), 93–94.

14. Such approaches draw on the work of archeologist Juliet Clutton-Brock, who emphasizes control, captivity, and human profit as key elements (Clutton-Brock 1994).

15. From classic twentieth-century studies like E. E. Evans-Pritchard's *The Nuer* (1940) to Roy Rappaport's *Pigs for the Ancestors* (1967), other-than-humans are frequent ethnographic companions in anthropological accounts. A thorough review of how they have been rendered visible, active, and social (or not) is beyond the scope of this introduction. In this context, it is sufficient to note that with a few important exceptions, there has been a tendency for such interspecies relational practices to be sidelined by other pressing theoretical concerns. Anthropological approaches to African pastoralism, by scholars such as Evans-Pritchard (1940), Rada Dyson-Hudson and Eric A. Smith (1978), and Godfrey Lienhardt (1961), might have been remembered as books about the relational practices involved in the domestication of cows at a particular historical moments, but more often they are referred to for their contributions to anthropological understandings of (human) social organization in stateless societies, segmentary lineage as a structural principle, and cultural adaptations to specific landscapes. Similarly, while Rappaport's account of Melanesian pigs could be read as a story of semidomesticated pigs and their inclusion in ritual activity, it is more often referred to as a book about cultural ecology and the dynamic nature of socioecological equilibrium.

16. Ingold wrote against classic Euro-American definitions of domestication, arguing that they are too closely associated with culturally specific frames of production, technical development, and property while also presupposing ever-increasing human control over the growth and reproduction of plants and animals and ignoring how animals also act upon humans (Ingold 2000).

17. Most archeologists today would argue, for example, that agriculture was not a sudden invention but a long coevolutionary, cumulative process marked by changes on both sides of a relationship in which partner populations became increasingly interdependent (Zeder et al. 2006, 139; Harlan 1995; Smith 1995; Gifford-Gonzalez and Hanotte 2011; see also Cassidy and Mullin 2007). Zoologists Keith Dobney and Greger Larson maintain that the word "domestication" remains too reliant on a strict and mutually exclu-

sive wild-domestic dichotomy and that this has “prevented a deeper appreciation of those animals whose lives are spent somewhere in between” (2006, 269).

18. This has not stopped archeologists from searching for origins. Vigne (2011), who prefers the term “neolithisation” to Neolithic revolution, repeatedly refers to temporal markers like “the birth of domestication” (172), “the birth of animal husbandry” (177), or the Near East as the “cradle of Neolithisation” (177), indicating that a linear evolutionary paradigm and a search for origins still matters.

19. Those who emphasize genetic changes as a sign of domestication might argue that as long as a return to the wild is a possibility, the animal is not fully domesticated in the first place. This approach presupposes that it is possible to distinguish the “wild” from that which is “not wild.” A full discussion is beyond the scope of this introduction, but see Lien and Law (2011) for an account of how this plays out in relation to escaped farmed salmon that breed with their distant “cousins” in their ancestors’ rivers of origin.

20. For a critique from a nonarcheologist, see Fijn (2011). For counternarratives with a focus on plants, see Scott (2011) and Tsing (2012).

21. Nagasawa et al. (2009) propose, for example, that interspecies bonding between humans and dogs may be enabled by a hormonal feedback loop, mediated by increased levels of oxytocin triggered by eye contact. Neither intentional nor unilateral, such effects can nevertheless significantly shape how the dog-human relation unfolds. Studying reindeer herding systems in Southern Siberia, Charles Stépanoff develops the concept of “reciprocal learning” (Paine 1988) and argues that herders have come to rely on reindeer’s cognitive skills, desires, and autonomy to maintain the herd. This does not preclude an asymmetrical relation, but it challenges the distinction between the domestic and the wild. Paradoxically, then, humans can domesticate reindeer only if they keep them wild (Stépanoff 2012, 287, 309).

22. Zeder, for example, is careful to point out that some animals (like cats) “never reached this final destination” (Zeder 2010).

23. See Callon (1986) for more on enrollment.

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