

Time, Species, and Human–Animal Relations in Modern Latin America

A Response to Éric Baratay

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Abstract: This short essay examines Éric Baratay's argument that Western cultures have generally ignored intra-species variations over time and thereby ejected nonhuman animals from dominant versions of history. Drawing on the modern history of Latin America, it argues that Baratay's interpretation is compelling but incomplete. Species categories were an important aspect of the culture imposed on the Americas by the Spanish and Portuguese, and helped structure various social practices and discourses. However, many Latin Americans have thought about how species behaviour varied over time. This was because of various cultural traditions in which the boundaries and behaviour of species were considered mutable, and the close association between notions of animal domestication and progress. Indeed, some people—farmers, ranchers, soldiers, conservationists, scientists, environmentalists—were closely involved in engineering intra-species variations and managing nonhuman animals' own rhythms and agendas. In sum, the essay suggests that the relationship between temporalities and human–animal relations is a promising line of historical enquiry, promising insights into notions of modernity, comparative history, and the articulation of different ways of relating to nonhuman animals.

Keywords: *species; temporalities; Latin America; modernity; human–animal relations*

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In 1894, Mexico opened its seventh annual national livestock exhibition. José Segura, a government agronomist, stood and gave a speech that captured the optimistic mood. Careful breeding and feeding of livestock would create novel “races with diverse aptitudes; for provisioning and feeding cities at a good price; to provide excellent primary material for industry; good horses for the army; strong and hard-working beasts for work in the fields and transport; and models of shapeliness and speed to satisfy the desires and caprices of the sportsman.”¹ Attendees of other livestock shows being organized around the same time across the hemisphere, from Argentina to Cuba, would have heard very similar ideas—that nonhuman animals’ bodies, metabolisms, and behaviour could be systematically altered and improved; and that, implicitly, such improvements mattered, because human societies relied on and were shaped by these things. It may be the case, as Baratay argues, that naturalists and philosophers in Western cultures have typically given “little thought” to variations within animal species across space and, especially, across time. But some people clearly did. After all, temporal scales are rather like cartographic maps. The kind and size—and indeed *scale*—of the maps we make depends in large part on what we want to do, and where (and when) we want to go.

Of course, from a Latin American perspective, a lot of Baratay’s argument for the neglect of intra-species variation with Western culture is recognizable. Human–animal history itself is still a new and under-explored historiographical field in Latin America compared to Europe and North America.² Understandably, Latin American historians have generally tended to emphasize the dramatic and negative human impact on the natural environment, which may explain why some have been cautious of overemphasizing nonhuman animals’ powers and autonomy.³ Still, some of the new work in this field certainly underlines the importance of species categories in Latin American societies. European colonizers did indeed think largely in terms of

1 Don José Segura, qtd. in Saucedo Montemayor, *Historia de la ganadería*, 50. My translation.

2 For a useful overview, see Vergara, “Bestiario Latinoamericano”.

3 For considered discussions of this issue, see De Carvalho Cabral, et al., *More-Than-Human Histories*; Soluri, *Creatures of Fashion*, 2.

species that were useful for different purposes, or what Norton calls “modes of interaction”; some species were useful as military technology (horses, dogs); some were livestock or *ganado* (cows, pigs); others were game to be hunted.⁴ To make sense of the “new animals” they encountered in the Americas, for a time Spanish colonists sometimes simply re-used existing categories: turkeys were “native chickens”; llama were “rams” or “sheep”; pumas were “lions,” and so forth.⁵ That is, for many purposes animal species were regarded as relatively stable categories, or at least stable enough to be used as foundations for colonial information-gathering, natural histories, administrative divisions, and fiscal policies. After independence, species categories remained important to national institutions regulating livestock, sports, and wildlife. In the twentieth century, Latin America’s emerging ranks of professional biologists made cataloguing the startling diversity of species in different national territories one of their central tasks.⁶ Beginning in the late nineteenth century, Latin American nations began to build zoos to display wild creatures. As in many parts of the world, such institutions were considered essential to modern urban life. Whereas zoos in Europe and the United States displayed exotic creatures imported from distant and frequently colonial territories, Latin American zoos focused on species from their own national territories, especially creatures that were being displaced by the great human-made waves of deforestation and urbanization that characterized Latin America’s “Great Acceleration”.⁷

Still, while notions of stable species were important for some purposes and perspectives, this is not the whole picture. Varied and otherwise dramatically different cultural traditions have understood species as mutable things. An obvious starting point would be the perspectives on nonhuman animals adopted by Indigenous groups across lowland Amazonia which, as suggested by a large corpus of ethnographic research amassed since the early twentieth century,

4 Norton, *The Tame and the Wild*, 11.

5 Alves, *Animals of Spain*, 100; Asúa and French, *New World of Animals*, 50.

6 Leal, “Wild and Trapped”, 85.

7 Leal, “Wild and Trapped”, 89. For a general overview, see Duarte, “Zoos in Modern Latin America”.

share certain features. According to Eduardo Viveiros de Castro, the idea that human and nonhuman creatures shared a common human origin is a “virtually universal” notion; origin myths describe processes of physical speciation, but nonhuman animals continue to experience the world as humans.⁸ Thus, while species categories are “fundamental” among the Arawaté and many other groups in the Greater Amazon, species is “not as much a principle of distinction as a principle of relation”; it is defined not by anatomy or physiology, but by behaviour.⁹ In practical terms, a creature’s species per se is less important culturally than whether or not they are predators, prey, or a kind of familiarized kin. Moreover, species boundaries are porous; certain individuals (human or nonhuman) are capable of transforming and adopting the perspective or physical form of other creatures.¹⁰

Indeed, across modern Latin America we can also find ritual specialists working in very different contexts who claim the ability to communicate with and sometimes take the physical form of other creatures for different purposes. They do not only abound in the ethnographies of Amazonia; they are less prominent but nevertheless present in similar studies of Mesoamerica, gathered under the loose concept of *nagualism*; in Haiti and the Dominican Republic, shape-shifting demons known as *bacás* are said to take the form of cows, dogs, pigs, and horses — that is, the very creatures introduced by the Spanish conquistadors; the *bacás*’ “fusion of a money-making male spirit and a being that can shape-shift into an animal is unique to Hispaniola”.¹¹ Of course, it is tempting to interpret these examples as culturally marginal almost by definition — vestiges of earlier non-Western or at least pre-modern perspectives. After all, this was often how the first professional anthropologists, specialists in the non-modern, understood them. But this risks underplaying the dynamism, adaptability, and influence of these practices and beliefs.¹²

8 Viveiros de Castro, “Cosmological Deixis”, 471.

9 Viveiros de Castro, “Some Reflections”.

10 Viveiros de Castro, “Some Reflections”.

11 Foster, “Nagualism”; Derby, *Bêtes Noires*, xiv.

12 Whitehead, “Loving”.

Beginning in the 1920s, nationalist intellectuals in countries as diverse as Brazil and Mexico began to immerse themselves in ethnographic accounts and incorporate Indigenous perspectives on the natural world into literature and the visual arts, albeit in highly selective and distorted forms. Mário de Andrade’s extraordinary novel *Macunaíma*—a milestone in Brazilian literature—drew in large part on the author’s playful retelling of shape-shifting stories gathered in Theodor Koch-Grünberg’s five-volume anthropological study of the Pemon, *Vom Ruraima zum Orinoco*. In Mexico, the shape-shifting traditions referred to as *nagualism* have repeatedly inspired novelists, intellectuals, and artists. They also moved the ingenious grifter Carlos Castañeda to garble traditions together and peddle the resulting concoction to the Western counterculture.¹³ In Hispaniola, the power of *bacás* and their powerful owners are “open secrets [...] widely recognized but generally not publicly discussed”.¹⁴ Perhaps most important, the rise of new Indigenous movements since the 1970s—led by Indigenous people themselves, rather than white or mestizo mediators—have undoubtedly “revitalized” some aspects of Indigenous worldviews, particularly in the Andes, as communities seek to fight extractivism and espouse models of ecological balance between and across multiple species.¹⁵ For a figure like Nemonte Nenquimo, for example, the fight against oil drilling in lowland Ecuador is simultaneously an effort to strengthen Waorani understandings of non-human animals as a kind of kin, and to translate these cosmologies for non-Indigenous audiences.¹⁶

Even if we place these cultural perspectives to one side, it is clear that many people in Latin America—and not especially marginalized people—did give plenty of thought to how animal species might vary over time and, in doing so, impact human societies. As we have seen, livestock farmers and ranchers certainly did. Indeed, one of the reasons for the increasing dialogue between historians

13 Foster, “Nagualism”; Martínez, *El nahualismo*; Hardmann, ““He may be lying””. Hagler, “Exhuming the Nahualli”.

14 Derby, *Bêtes Noires*, xiii.

15 Kaltmeir, et. al., “Anthropocene as Multiple Crisis”, 37.

16 Nenquimo, *Seremos jaguares*.

of science and agriculture is the recognition of farms as important sites of knowledge production.¹⁷ Domestic animals were not just central to European colonial projects; *ideologies* of domestication were important too. Domestication was often imagined as a discrete, human-initiated event and accomplishment, the scale of which marked more advanced and especially European societies as superior to others. (We know better now, of course; the last four decades or so have seen an enormous shift in our understanding of domestication and when, where, and why it happened—a change surely connected to the post-1950s ethological innovations Baratay discusses.)¹⁸ Still, the capacity to continually breed and reshape domesticated animals has, at least since the eighteenth century in Europe and perhaps before, been touted as a sign of civilization and progress. As we have seen, in the late nineteenth century, livestock breeders and ranchers in Latin America started to present themselves as central to modernity. At the same time, Indigenous groups were portrayed as primitive and barbarous precisely because they relied on hunting rather than farming domesticated animals. In Patagonia, for example, Argentine and British observers found the Selknam's recurrent hunting particularly galling, both because it depleted the stocks of newly arrived sheep-farmers and because they assumed (erroneously) that native *guanacos* could be easily tamed.¹⁹ Efforts to acclimatize domesticated animals to new terrains boomed during the nineteenth century around the world, and Latin America saw its share of such experiments. Of course, in some ways, such projects expressed the idea of a species as a relatively stable entity, resistant to climatic and environmental changes. At the same time, acclimatizers believed that animals' own biological dynamism and "adaptive potential" would play a crucial role in such schemes.²⁰ Indeed, livestock improvers sometimes experimented with a very flexible approach to species. In the early twentieth century, experts at Mexico's ministry of agriculture tried (and failed) to create a new type of livestock by

17 Fitzgerald, et al., "Roundtable".

18 For an overview of changing interpretations, see Swanson, et al., *Domestication Gone Wild*.

19 Soluri, *Creatures of Fashion*, 47–74.

20 Penteado, "Brazilian Dromedaries", 244.

crossing a pig and a sheep.²¹ By the twentieth century, national agricultural censuses began to chart progress by counting improved and unimproved livestock under separate categories.

A concern for horse-breeding also runs deep in the region's history. Elite soldiers and horsemen gathered in early modern European courts, thought a great deal about breeding horses, and provided a lexicon and a source of analogies for thinking about human racial difference. Spanish colonial authorities regarded horses as vital military technologies, but struggled to control them or regulate breeding, given the need to reward Indigenous allies with horses, and horses' own capacity to go feral—that is, to escape human control and thrive in huge numbers.²² Latin America's new national armies inherited these concerns. Indeed, they were largely horse-powered well into the twentieth century, as was the first social revolution of the twentieth century (in Mexico). If the personal archives of Mexico's revolutionary generals are any guide, the breed, pedigree and performance of horses were a constant concern.²³ *Grosso modo*, modern Latin America echoed the global trend towards military mechanization. After all, the Mexican Revolution's crucial battle of Celaya in 1915 taught very similar tactical lessons to the bloodbaths of Europe's Western Front: cavalry charges were no match for trenches, barbed wire, and machine guns. Still, the story of the region's gradual shift away from cavalry, and its effects on the reach and counterinsurgent power of the state still awaits its historian.

While horse cavalry's cultural significance was on the retreat, the Cebu cattle breed played a starring role in Latin America's drama of livestock "improvement", giving that history a distinctive Latin American tempo while connecting the region to the wider world.

21 Lurtz, "Developing the Mexican Countryside", 450.

22 Cooley, *Perfection of Nature*. On the spread of horses across the Spanish empire and Indigenous territories, and resulting worries about the decline of breeds, see Renton, *Feral Empire*.

23 The archives of General Joaquín Amaro, patriarch of Mexico's postrevolutionary military, are clogged with photos of horses, and correspondence about horse breeding, racing, and polo. They are housed at the Fideicomiso Archivo Plutarco Elías Calles y Fernando Torreblanca in Mexico City.

Cebu cattle originate in South Asia, and were first introduced to the Americas by the British, who were seeking hardy draft animals for Caribbean sugar plantations.²⁴ Accustomed to warm climates and endowed with tough, tick-resistant skin, the fame of the Cebu gradually spread across the continent, burgeoning in the early twentieth century as Latin American ranchers sought to exploit growing global demand for beef. Still, the road to the “cebuization” of Latin America’s tropical herds was not straightforward.²⁵ Initially, some US and European investors and experts were sceptical of the breed, originating as it did in the supposedly backward, slothful and benighted societies of South Asia. However, hesitations were eventually drowned out by a growing stampede of everyday adoption by Colombian, Brazilian, and, later Mexican, ranchers. More serious than thinly-veiled “trans-species” racism were problems of disease.²⁶ The importation of European cattle into South America in the 1870s first introduced foot-and-mouth disease, or *aftosa* — a virus which rarely kills but saps the strength, weight, and productivity of cattle. However, it was a large shipment of Cebu breeding stock from Brazil to Mexico in 1946 to which most accounts attribute blame for a major outbreak in previously *aftosa*-free central Mexico. The resulting US–Mexico campaign to eradicate the disease and prevent its spread northward took eight years, and absorbed over half of US economic aid to Latin America; it confronted fierce criticism from Mexican scientists of US-backed livestock culls, and dozens of riots and a regional rebellion, placing serious strain on US–Mexico relations. Cebuization was big business then, and, on occasion, big politics.²⁷

Come the Cold War, the drive to upgrade and improve stock big and small was central to notions of development across the ideological spectrum. Most governments in the region established research centres to support the expansion and intensification of livestock farming.²⁸ When Peace Corps volunteers fanned out across Latin

24 McCook, “Neo-Columbian Exchange”, 23.

25 Gallini, “El Atila del Ganges”, 187.

26 Van Ausdal, “Tropical Beef Frontier”, 168.

27 Rath, *Dread Plague*.

28 Van Ausdal and Wilcox, “Hoofprints”.

America, one of their central tasks was to encourage rural communities to adopt new breeds of chickens, cattle, and sheep, as well as more systematic animal husbandry techniques. According to Moritz Thomsen, a former WWII-bomber pilot and one of the first volunteers dispatched to Ecuador, such reforms would not only provide the animal proteins believed essential for human physical and cognitive development. They also demanded an increased appetite for planning and financial risk, and an overhaul of the fatalistic attitudes to life and disease which Thomsen and his colleagues believed trapped people in poverty.²⁹ At the same time, revolutionary Cuba's project of dairy modernization served to boost popular nutrition and broadcast the regime's technological leadership in the face of US hostility. The project also provided a way to marginalize a troublesome domestic group — a small but influential number of large landowners committed to beef ranching for the US market. Reliant as it was on external inputs of various kinds (fossil fuels, feed) Cuba's project of dairy intensification waned after 1990, but is still remembered to this day, immortalized in the statue to *Ubre Blanca*, the revolution's outstanding dairy cow.³⁰ It was during the Cold War, too, that Latin America's urban middle classes began to invest in particular dog breeds as companion animals. Thus, the "Pet Revolution", when it arrived in the region, offered another way of upgrading and differentiating creatures of the same species.³¹

The exigencies of development have also demanded changes to those species known as pests. One case whose history I've examined recently is the "New World Screwworm" — a species of blowfly whose larvae eat the living flesh of warm-blooded mammals (mainly cows and deer, but sometimes also humans) and emit a foul odour. These are distinctly unlovely or "unloved" creatures, regarded by farmers, medics, and scientists alike as economically costly, ecologically useless, and aesthetically revolting.³² They were

29 Thomsen, *Living Poor*. For Thomsen's later scepticism of such schemes, and the concept of development as such, see Thomsen, *The Saddest Pleasure*, 282–83.

30 Funes-Monzote, "Rise and Fall of Dairy Cows".

31 Leal, "Tenacious", 22.

32 Rose and Van Dooren, "Unloved Others".

a particular threat for farmers who wanted to raise cattle intensively in feedlots, whose crowded, filthy conditions, combined with the short legs produced by selective cattle breeding, made them perfect for infestations. In the 1950s, US entomologists created a new technique to control these insects: they began to breed flies by the billions in factories, sterilize them with gamma radiation, and scatter them from aircraft in an effort to suppress wild populations. After applying the technique in a pilot project in Curaçao, and then to a swathe of the southern United States, the US Department of Agriculture pushed this campaign into Mexico and Central America, eventually establishing a permanent, fizzing border of sterile flies suspended over the Darién Gap, continuously replenished by a Panamanian fly factory. Since the 1960s, with the support of the United Nations, many other nations have applied (and continue to apply) this so-called “Sterile Insect Technique” to other types of insect pests and vectors, harnessing industry, atoms, and insects’ own reproductive energies to bioengineer landscapes for the benefit of livestock, crops, and agribusiness.³³ The technique foreshadowed and helped propel a growing wave of efforts by states, scientists, and corporations to harness the temporal and spatial scales of insect life, from militarized honey bees to genetically-engineered mosquitoes.³⁴ As Renisa Mawani notes, it is insects’ life cycles and metamorphoses that, above all, endow them with the “plasticity” that is so productive for modern technoscience.³⁵

By the twentieth century, too, Latin American efforts to manage and conserve wildlife expanded and took various forms. Initially, at least, concern for wild animals rarely induced the creation of national parks, but over time those involved began to think a good deal about nonhuman animals’ dynamic relationship with particular ecological contexts.³⁶ Where this context was well understood—in Peru’s efforts to conserve *guanaco* birds after 1940,

33 Some preliminary findings on the international history of this technique can be found in Rath, “Radiating South”.

34 Kosek, “Ecologies of Empire”; Reis-Castro, “Becoming Without”.

35 Mawani, “Insects, War, Plastic Life”.

36 Freitas, et al., “Before Biodiversity”, 891.

or *vicuñas* in the 1960s—this could underpin success.³⁷ Where it was not, it could lead to fiasco. In the 1940s, Argentina introduced North American beavers to southern Patagonia, in part due to these animals’ association with progress, labour, sexual monogamy, and whiteness. They transformed the landscape far beyond anything anticipated by the authorities, damming rivers, shifting the chemical and biological make-up of waters, inundating fragile native trees, and producing “apocalyptic landscapes”.³⁸ Latin Americans have placed nonhuman animals into a series of time-scales or temporalities, depending on what they want to do. But they have never been able to do this as they pleased. Nonhuman animals—feral horses, beavers, ants—have their own capacities and agendas, indeed their own ways of interpreting and scaling their environments.³⁹

In this way, Baratay’s essay raises some difficult questions about how we approach the history of human–animal relations. To identify the “dominant” culture of human–animal relations in a given context, where should we look? Why focus on naturalists and philosophers rather than, say, the practices and vernacular knowledge of farmers, peasants, rat-catchers, cavalrymen, or empire-builders? Should we focus on prescriptive norms or on practice? The problem is quite complicated. As Harriet Ritvo noted in one of her essays, people will answer questions about human–animal relations quite differently depending on who they think is asking and who is listening.⁴⁰ Do we need some kind of explicit model for thinking about how certain ideas about nonhuman animals emerge and become—to use a thoroughly sociological and possibly ill-fitting term—hegemonic? How can we fit animals’ own agencies and agendas into that model? Such thorny theoretical questions lie behind much of the burgeoning interest in human–animal history.

37 Cushman, “Most Valuable Birds in the World”; Wakild, “Saving the Vicuña”.

38 Dicenta, “White Animals”, 321.

39 For a fascinating discussion of leaf-cutting ants’ roles in interpreting and shaping the Brazilian interior, see De Carvalho Cabral, “Meaningful Clearings”. For an interpretation of the US–Mexico border as an “interspecies” entity shaped by nonhuman “bordering practices” see Youatt, *Interspecies Politics*, 27–50.

40 Ritvo, “Our Animal Cousins”, 50.

Exploring the relationship between time scales and human–animal relations seems to me a very promising way to push scholarship forward. It could help us better understand how different modes of interaction with animals are articulated and justified; it could also sharpen our understanding of the multiple temporalities that historians have long considered central to modern life, in which nonhuman animals have been central symbols, touchstones, and participants.⁴¹ As the field of human–animal history in Latin America grows, attention to temporalities will help us situate the region comparatively, illuminating how processes visible in many parts of the world—from the creation of zoos to the irradiation of insects—unfolded in distinctive ways. A final question Baratay’s essay raises is whether historians can avoid writing more about some nonhuman animals than others. Baratay’s suggestions for interdisciplinarity, reading against the grain, and the creative triangulation of different documentary sources are most welcome. But it still seems to me that our histories may always skew towards the kinds of nonhuman animals (largely vertebrates and larger mammals) that most feature in Baratay’s essay. This is partly because of the intensity of their interactions with humans and the evidentiary traces left, as Baratay notes. But I think it may also have to do with our capacity (learned, through history) to identify and empathize with some creatures more than others. Insects may have become increasingly manipulable, but they are usually seen as profoundly strange and alien beings, few of whose behaviours, reproductive habits, life cycles, or learnings seem remotely similar to humans, sometimes horrifyingly so. (The literary and Hollywood examples one could summon here are so obvious they practically write themselves.) So, writing history from nonhuman animals’ perspective is not just a matter of getting creative with documentary sources. It will also involve thinking self-critically about the meaning and history of empathy. In fact, one way to do this is to study our relationship with those uncharismatic creatures which generally alienate or even disgust us, and whose scale of life makes their individual study fraught with difficulty, and do our best to understand the historical impact of these creatures, too.

41 For a recent, wide-ranging exploration of multiple temporalities, see Edelstein, et al., *Power and Time*.

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