Emberley at the University of Western Ontario and for the wonderful students in the Animal Signs in Literature, Film, and Theory course that I taught there in 2006. At the University of Victoria, Warren Magnusson in the Department of Political Science generously read and commented on chapter 1. In the company of someone so fluent in political theory, I recognized my disciplinary limitations in attempting to theorize animal capital but at the same time grew in my commitment to interdisciplinary risk taking. My new colleagues in the Department of English enthusiastically engaged with a version of chapter 4 at a faculty colloquium organized by Chris Douglas, and I deeply appreciate their collegiality.

I am fortunate to have had Richard Morrison as editor at the University of Minnesota Press, and I am grateful to Adam Brunner for his help and advice. Two anonymous readers offered valuable feedback that helped make this a much stronger book. Many thanks to Tara Thompson, a graduate student at the University of Victoria, who painstakingly formatted the manuscript.

My parents and siblings are among the most exceptional people I know; I've been blessed with a surplus of familial love and support. Pauline Wakeham has never failed to awaken the best in me through her unparalleled combination of intellectual commitment, personal integrity, and quirky humor; she is brilliant not only as a scholar but as a friend. Finally, to Jay and John, who patiently weathered the everyday of this book with me, thank you.

[Introduction]

New Life Forms and Functions of Animal Fetishism

Animal Nation

In 2002, Maclean's magazine, one of Canada's oldest national newsweeklies, ran an advertisement configuring the nation as a beaver spread out across the page like a dissection specimen. The beaver's internal organization is bared to encyclopedic view, with lines spoking out from its interior to labels biologically identifying blood organs and body parts (see Figure 1). The ad caption consists of a few pithy words tacked beneath the splayed sign of the animal: "Maclean's. Canada. In depth." The equivalent standing of the two proper names in the caption, "Maclean's" and "Canada," positions the media and the nation as virtually synonymous powers; the sober black print of "Canada" is, if anything, overshadowed by the larger, bolder "Maclean's," whose blood-red typography chromatically resonates with the red tissues and organs of the beaver. A third proper name and trademark appear in more discrete red type at the top right-hand corner of the advertisement: "Rogers," short for Rogers Communications Inc. The Rogers conglomerate owns Maclean's as well as numerous other print, television, and telecommunications media. The placement of its name in the ad is suggestive of the

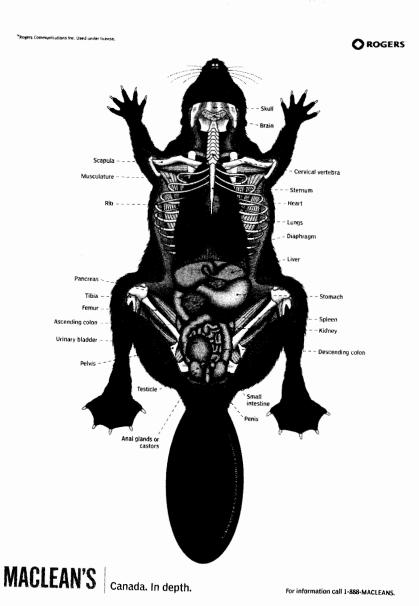


Figure 1. "Maclean's. Canada. In depth." The visceral figure of the nation in a 2002 advertisement for Maclean's, Canada's only national weekly current affairs magazine.

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superordinate power of capital over both the press and the nation in our current era.

Taxonomically tacking a powerful network of proper names onto an animal anatomy is generative of fetishistic effects that Marx first theorized in relation to the commodity form, in this case effecting a reification of the nation form by associating "Maclean's," "Canada," and "Rogers" with the raw facticity of the specimen. Yet it is not just any specimen to which the trinity of powers has been attached. The beaver is already an iconic symbol, a fetishized sign of the nation whose familiarity and recognition are presupposed by the ad's "inside" joke. If the beaver has furnished one species of animal capital for the nation as colonial pelt, it has furnished another as postcolonial brand. Instated as Canada's official emblem in 1975, the sign of the beaver was deployed as a tool of affective governance to involve Canadians in a project of national identity building and unity. The move consolidated the economic and symbolic capital accumulated in the sign of the beaver over three centuries of Euro-Canadian traffic in North America, presenting it as a natural, self-evident sign of the nation.²

Yet, as this book sets out to show, animal signs are anything but self-evident. Confronting their fetishistic functions in cultural discourses of the twentieth and twenty-first centuries begins with a determination to excavate for the material histories of economic and symbolic power that are cunningly reified in them. Animal signs function fetishistically in both Marxian and psychoanalytic senses; that is, they endow the historical products of social labor to which they are articulated with an appearance of innate, spontaneous being, and they serve as powerful substitutes or "partial objects" filling in for a lost object of desire or originary wholeness that never did or can exist, save phantasmatically. The beaver is Canada's fetish insofar as it configures the nation as a life form that is born rather than made (obscuring recognition of the ongoing cultural and material history of its construction) and insofar as it stands in for an organic national unity that in actuality does not exist.

Contrary to its fetishistic effects, then, there is nothing natural about the beaver sign institutionally minted in the 1970s as a means of affectively interpellating citizens into an ideal of national unity through the "innocent" appeal of the animal and of construing the nation as an

indigenous organism. Nor is the normative chain of associations triggered by the symbol of the Canadian beaver—moth-eaten stereotypes of the fur trade nostalgically evoking a bygone era of colonial contact and commerce, an era of imagined authenticity and fullness of nature prior to the ostensible "vanishing" of aboriginal and animal populations³—natural. In the 1970s, the institutionalization of the sign of the beaver mustered this nostalgic web of associations into the political service of a dominantly white, Euro-Canadian discourse of national culture, one pivoting on an assertion of its own indigeneity. Through the animal capital of the national symbol, a postcolonial project of national culture deeply structured by the logics of capital and "White normativity" has become the privileged content of a discursive struggle for "native space," displacing the ongoing machinations of internal colonialism and white supremacy, as well as infranational struggles for First Nations' self-determination.4

The Canadian beaver constitutes a powerful nodal point within a national narrative that nostalgically remembers the material history of the fur trade as a primal scene in which Native trappers, French coureurs de bois, and English traders collaboratively trafficked in animal capital, at the same time as it advantageously forgets, through the symbolic violence of occupying the semiotic slot of indigeneity, the cultural and ecological genocides of the settler-colonial nation form mediating capital's expansion. Ostensibly free of any (human) linguistic, ethnic, racial, class, or gender traits, the indigenous species is put into symbolic circulation as a neutral signifier incapable, it would seem, of communicating political bias against any individual or constituency in Canada. Yet as feminist, critical race, poststructuralist, and postcolonial theorists have labored to show, the "privileged empty point of universality" slyly enciphers the dominant subject position in a social order, enabling that subject position to pass as the unmarked social standard.⁵ That "testicle" and "penis" are pointed to in Maclean's somatic diagram of the beaver (alongside "spleen" and "stomach") inadvertently reveals the default, or universal, gender of the national ontology. Enciphering white masculine English embodiment as a national and natural standard, the Canadian symbol also tacitly racializes the difference of ethnic and diasporic citizenship. Under the universal alibi of species life, proverbially innocent of political designs, the Canadian beaver subtly counter-

indicates the relinquishment of white English cultural and economic privilege pronounced by official state multiculturalism.

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Heavily burdened with a historical complex of economic and libidinal investments, the sign of the beaver rematerialized in a national magazine in 2002 to reify a new nexus of knowledge, nation, and capital at the dawn of the twenty-first century: Maclean's, Canada, Rogers.6 The wit and ostensible difference of the Maclean's discourse lies in its literal cross-sectioning of the nation's animal fetish. The magazine's deliberately literal treatment holds the defamiliarizing potential of opening the organic ideology of the nation to an ironic gaze and of bringing a "wry" self-reflexivity to bear on the stock image of the nation.⁷ Yet the biological schema of the nation's organic constitution serves to repress rather than open those "recesses of the national culture from which alternative constituencies of peoples and oppositional analytic capacities may emerge."8 Granting less an ironic analysis of the nation-fetish and more a medicalized scopophilia arousing fascination cum revulsion around its mock vivisection, the ad paradoxically manages to revive a tired cliché at risk of ending up on the scrap heap of history as global capitalism threatens to render the distinct "life" of the nation passé.

What makes animal signs unusually potent discursive alibis of power is not only that particularist political ideologies, by ventriloquizing them, appear to speak from the universal and disinterested place of nature. It is also that "the animal," arguably more than any other signifier by virtue of its singular mimetic capaciousness (a notion that will be further elaborated over the course of this book), functions as a hinge allowing powerful discourses to flip or vacillate between literal and figurative economies of sense. Even in its rendering as a vivisection or perhaps, especially in Maclean's raw rendering—the national fetish hinges on the double sense of animals' material and metaphorical currency. Here the tools of colonial discourse analysis can be brought to bear on animal capital inasmuch as the animal sign, not unlike the racial stereotype theorized by Homi Bhabha, is a site of "productive ambivalence" enabling vacillations between economic and symbolic logics of power.9 For Bhabha, ambivalence constitutes the discursive structure of fetishism. "Within discourse," he writes, "the fetish represents the

simultaneous play between metaphor as substitution (masking absence and difference) and metonymy (which contiguously registers the perceived lack)."¹⁰ As William Pietz suggests, however, couching the problem of fetishism *rhetorically*, as Bhabha does, risks textualizing it and detaching it from a material field of relationships that are not reducible to linguistic-discursive structures.¹¹ By the end of this book it should be clear that animal capital resists both culturalist tendencies to reduce capitalism to an economy and fetishism of signs and materialist tendencies to reduce capitalism to an economy and fetishism of substances.

Much more could be done to comparatively evaluate the productive ambivalence of the colonial stereotype and that of the animal sign. For now, suffice it to say that it is the capacity of animal life to be taken both literally and figuratively, as a material and symbolic resource of the nation, that constitutes its fetishistic potency. As will be elaborated over the course of this book, the ambivalence of animal signs is for this reason a pivotal means of depoliticizing volatile contradictions between species and speculative currencies of capital and between capitalism's material and symbolic modes of production. In the particular case of the Maclean's ad, the productive ambivalence of the beaver mediates a national discourse that vacillates between a traumatic remembering and a willful forgetting of Canada's forced birth. While the image of a dead specimen potentially yields a grisly reminder of the material exercise of power upon which the birth of the nation is historically contingent, it actually works to render the material violence of the nation merely metaphorical for our times.

Animal Capital

The Maclean's text helps to introduce a book intent on theorizing a biopolitical terrain and time of animal capital that includes, but invariably exceeds, the cultural discourses of the specific nation from which I write. The juxtaposition of two terms rarely theorized in conjunction—"animal" and "capital"—signals a double-edged intervention into two subjects whose dangerously universal appeal necessarily situates this troader field of transnational cultural studies. On the

ment with the emergent "question of the animal," in Cary Wolfe's words, challenging its predominantly idealist treatments in critical theory and animal studies by theorizing the ways that animal life gets culturally and carnally rendered as capital at specific historical junctures. On the other hand, by developing a series of unorthodox genealogies of animal capital across Fordist and post-Fordist eras, the book seeks to rectify a critical blind spot in Marxist and post-Marxist theory around the nodal role of animals, ideologically and materially, in the reproduction of capital's hegemony. While theorists of biopower have interrogated the increasingly total subsumption of the social and biological life of the *anthropos* to market logics, little attention has been given to what I am calling animal capital. This book's double-edged intervention suggests a critical need within the field of cultural studies for work that explores how questions of "the animal" and of capital impinge on one another within abysmal histories of contingency.

Against a mythopoetic invocation of animal signs as a universal lingua franca transcending time and space, then, I seek to historicize the specific cultural logics and material logistics that have produced animals as "forms of capital" (in the words of Pierre Bourdieu) across the twentieth and early twenty-first centuries. "Animal capital" simultaneously notates the semiotic currency of animal signs and the carnal traffic in animal substances across this period. More accurately, it signals a tangle of biopolitical relations within which the economic and symbolic capital of animal life can no longer be sorted into binary distinction. This book argues that animal memes and animal matter are mutually overdetermined as forms of capital, and its aim is to track what Bourdieu terms the "interconvertibility" of symbolic and economic forms of capital via the fetishistic currency of animal life. 13

A conjugated inquiry into the historical entanglements of "animal" and "capital" not only is long overdue within the variegated field of transnational cultural studies but arguably is pivotal to an analysis of biopower, or what Michel Foucault describes as a "technology of power centered on life." At stake in biopower is nothing less than an ontological contest over what Michael Hardt and Antonio Negri refer to as the "production and reproduction of life itself." Foucault was the first to remark on how the sign of the animal emerged at the "threshold of

simultaneous play between metaphor as substitution (masking absence and difference) and metonymy (which contiguously registers the perceived lack)."¹⁰ As William Pietz suggests, however, couching the problem of fetishism *rhetorically*, as Bhabha does, risks textualizing it and detaching it from a material field of relationships that are not reducible to linguistic-discursive structures.¹¹ By the end of this book it should be clear that animal capital resists both culturalist tendencies to reduce capitalism to an economy and fetishism of signs and materialist tendencies to reduce capitalism to an economy and fetishism of substances.

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ment with the emergent "question of the animal," in Cary Wolfe's words, challenging its predominantly idealist treatments in critical theory and animal studies by theorizing the ways that animal life gets culturally and carnally rendered as capital at specific historical junctures. On the other hand, by developing a series of unorthodox genealogies of animal capital across Fordist and post-Fordist eras, the book seeks to rectify a critical blind spot in Marxist and post-Marxist theory around the nodal role of animals, ideologically and materially, in the reproduction of capital's hegemony. While theorists of biopower have interrogated the increasingly total subsumption of the social and biological life of the *anthropos* to market logics, little attention has been given to what I am calling animal capital. This book's double-edged intervention suggests a critical need within the field of cultural studies for work that explores how questions of "the animal" and of capital impinge on one another within abysmal histories of contingency.

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biological modernity," marking a shift to "untamed ontology" or "life itself" as the new object of power. ¹⁶ The fascination in the *Maclean's* ad with the internal organs of the beaver—rather than with bodily extremities such as teeth, fur, tail, and feet—would seem to dramatize Foucault's claim that when life becomes the "sovereign vanishing-point" in relation to which power is oriented, it is the "hidden structures" of the animal, its "buried organs" and "invisible functions," that emerge as its biological cipher. ¹⁷

The role of biopower in the globalization of market life has compelled a growing body of theory devoted to illuminating its diverse means and effects. Many recent theories of biopower have migrated away from Foucault's focus on the discourses and technologies of the state to scan instead networks and technologies of global capitalism. Hardt and Negri draw on Foucault to theorize "the biopolitical nature of the new paradigm of power" in the context of a transnational empire of capital that, they claim, has superseded the sovereignty of the nation-state.¹⁸ Empire, they argue, operates as a "society of control," a diffuse network of power in which "mechanisms of command become ever more 'democratic,' ever more immanent to the social field, distributed throughout the brains and bodies of the citizens" (23). In this paradigm of power, hegemonic consent and participation in market life is solicited by means of semiotic and affective technologies increasingly inseparable from the economic and material conditions of capital's reproduction. As Hardt and Negri describe it, "Biopower is a form of power that regulates social life from its interior, following it, interpreting it, absorbing it, and rearticulating it. Power can achieve an effective command over the entire life of the population only when it becomes an integral, vital function that every individual embraces and reactivates of his or her own accord. As Foucault says, 'Life has now become ... an object of power'" (23-24).

Hardt and Negri reiterate another seminal remark of Foucault's: "The control of society over individuals is not conducted only through consciousness or ideology, but also in the body and with the body. For capitalist society biopolitics is what is most important, the biological, the somatic, the corporeal." However, their analysis immediately gravitates away from the body and toward the figure of a "social bios" in

which "immaterial" modes of intellectual-symbolic labor, they argue, now predominate.20 Hardt and Negri do carefully qualify that to claim that immaterial production is now dominant is not to say that material labor has disappeared as a condition of capital.²¹ Nevertheless, by theoretically privileging the intellectual-linguistic conditions of capital in their own analysis, they risk reinforcing empire's ether effects, which is to say the effacement of the material-ecological platforms supporting capitalism's symbolic, informational, and financial networks. In privileging bios over zoe in their analysis—two Greek terms for life that, according to Giorgio Agamben, respectively signify "the form or way of living proper to an individual or group" and "the simple fact of living common to all living beings (animals, men, or gods)"22—Hardt and Negri suggest that somehow human social life (as the subject of biopolitics) can be abstracted from the lives of nonhuman others (the domain of zoopolitics). Zoopolitics, instead, suggests an inescapable contiguity or bleed between bios and zoe, between a politics of human social life and a politics of animality that extends to other species. However, what Hardt and Negri term "the ontology of production"23 namely, the immanent power of the multitude to constitute the substance of its life world—takes on an unexpectedly metaphysical quality in its association with forms of "immaterial [social] labour" that no longer appear contingent on animal bodies.²⁴ Indeed, the "social flesh" of the multitude is conceived in Deleuzian fashion as "pure potential" or virtuality.²⁵ Despite Hardt and Negri's attempt to move beyond the "horizon of language and communication" that contours the concept of immaterial labor in the work of contemporary Italian Marxists (something they do by theorizing affect as the missing biopolitical link to the animal body), there are few signs that the social flesh eats, in other words, few signs that the social bios is materially contingent upon and continuous with the lives of nonhuman others.²⁶

This book initiates a different trajectory of biopolitical—or, we might say, zoopolitical—critique, one beginning with a challenge to the assumption that the social flesh and "species body" at stake in the logic of biopower is predominantly human.²⁷ Actual animals have already been subtly displaced from the category of "species" in Foucault's early remarks on biopower, as well as in the work of subsequent theorists of

biopower, for whom animality functions predominantly as a metaphor for that corporeal part of "man" that becomes subject to biopolitical calculation. In Agamben's influential theorization of "bare life," for instance, animals' relation to capitalist biopower is occluded by his species-specific conflation of zoē with a socially stripped-down figure of Homo sacer that he traces back to antiquity.²⁸ However, the theorization of bare life as "that [which] may be killed and yet not sacrificed"29—a state of exception whose paradigmatic scenario in modernity is, for Agamben, the concentration camp—finds its zoopolitical supplement in Derrida's theorization of the "non-criminal putting to death" of animals, a related state of exception whose paradigmatic scenario is arguably the modern industrial slaughterhouse.³⁰ Indeed, the power to reduce humans to the bare life of their species body arguably presupposes the prior power to suspend other species in a state of exception within which they can be noncriminally put to death. As Cary Wolfe writes, "as long as it is institutionally taken for granted that it is all right to systematically exploit and kill nonhuman animals simply because of their species, then the humanist discourse of species will always be available for use by some humans against other humans as well, to countenance violence against the social other of whatever species—or gender, or race, or class, or sexual difference."31 Trophy photos of U.S. military personnel terrorizing Iraqi prisoners in Abu Ghraib prison in 2004 showed, among other things, a naked Iraqi man on all fours, with a leash around his neck, and prisoners cowering before German shepherd dogs. Cruelly, the dog is made to function as a racist prosthetic of the U.S. military's power to animalize "the other," a power that applies in the first instance to the animal itself.³²

The biopolitical production of the bare life of the animal other subtends, then, the biopolitical production of the bare life of the racialized other. Returning to Foucault's ruminations on biopower, it becomes apparent that within "the biological continuum addressed by biopower" there is a line drawn within the living prior to the one inscribed by racism, a species line occluded and at the same time inadvertently revealed by Foucault's use of the term "subspecies" to describe the effects of racialization:

What in fact is racism? It is primarily a way of introducing a break into the domain of life that is under power's control: the break between what must live and what must die. The appearance within the biological continuum of the human race of races, the distinction among races, the hierarchy of races, the fact that certain races are described as good and that others, in contrast, are described as inferior: all this is a way of fragmenting the field of the biological that power controls.... This will allow power... to subdivide the species it controls, into the subspecies known, precisely, as races.³³

The pivotal insight enabled by Foucault—that biopower augurs "nothing less than the entry of life into history, that is, the entry of phenomena peculiar to the life of the human species into the order of knowledge and power"³⁴—bumps up against its own internal limit at the species line. The biopolitical analyses he has inspired, in turn, are constrained by their reluctance to pursue power's effects beyond the production of human social and/or species life and into the zoopolitics of animal capital.³⁵

The crux of this book's argument is that discourses and technologies of biopower hinge on the species divide. That is, they hinge on the zoo-ontological production of species difference as a strategically ambivalent rather than absolute line, allowing for the contradictory power to both dissolve and reinscribe borders between humans and animals. The phrase animal capital points, among other things, to the paradox of an anthropocentric order of capitalism whose means and effects can be all too posthuman, that is, one that ideologically grants and materially invests in a world in which species boundaries can be radically crossed (as well as reinscribed) in the genetic and aesthetic pursuit of new markets.

The "question of the animal" exerts pressure on theorists of biopower and capital to engage not only with the ideological and affective functions of animal signs but with material institutions and technologies of speciesism. The material dimensions of the question are once again raised by Derrida, who writes in unmistakably Foucauldian terms:

It is all too evident that in the course of the last two centuries these traditional forms of treatment of the animal have been turned upside

down by the joint developments of zoological, ethological, biological, and genetic forms of knowledge and the always inseparable techniques of intervention with respect to their object, the transformation of the actual object, its milieu, its world, namely, the living animal. This has occurred by means of farming and regimentalization at a demographic level unknown in the past, by means of genetic experimentation, the industrialization of what can be called the production for consumption of animal meat, artificial insemination on a massive scale, more and more audacious manipulations of the genome, the reduction of the animal not only to production and over-active production (hormones, genetic crossbreeding, cloning, and so on) of meat for consumption but also of all sorts of other end products, and all of that in the service of a certain being and the so-called human well-being of man.³⁶

Derrida's words intimate that it is not enough to theorize biopower in relation to human life alone and that the reproductive lives and labors of other species (sexually differentiated labors, let us not forget) also become a matter of biopolitical calculation. Yet the reproductive value of animals is by no means only biological, as the preceding passage might suggest; animal signs and metaphors are also key symbolic resources of capital's reproduction. Given the soaring speculation in animal signs as a semiotic currency of market culture at the same time that animals are reproductively managed as protein and gene breeders under chilling conditions of control, an interrogation of animal capital in this double sense—as simultaneously sign and substance of market life—emerges as a pressing task of cultural studies.

If biopolitical critique has largely bracketed the question of the animal, critical theory and the emergent field of animal studies have, apart from a few significant exceptions, tended to sidestep materialist critique in favor of philosophical, psychoanalytical, and aesthetic formulations of animal alterity. Ironically, in contradiction to the passage cited earlier in which Derrida links the "over-active production" of animal life to the machinery of capitalism, the importance of the figure of the animal to deconstruction, which becomes explicit in Derrida's later work, is a key force to be contended with in countering the idealism surrounding the question of the animal. The Derridean text that will serve throughout this book as a foil against which I elaborate

a politics of animal capital is Akira Mizuta Lippit's Electric Animal: Toward a Rhetoric of Wildlife (2000). If I obsessively return to it throughout, it is because Lippit's aesthetic theory of animal affect and cinematic transference is at once riveting and profoundly idealizing, inasmuch as it allows capital to largely go missing as motive force and mediating material history. I will return to the work of Derrida and Lippit in a later section of this Introduction.

Glancing briefly back at the Maclean's ad, I want to tease out one last implication of the injunction it makes against the naïveté of taking the animal sign literally. Does not this injunction enable a kind of temporal transcoding whereby the naïveté of reading literally—and the economic violence of literally trapping an animal specimen—gets mapped onto the past, while the ironic stance of taking the animal figuratively effectively establishes the current era's distance and difference from that past? In the magazine's positioning of its readers in a relation of postmodern ironic distance from a past colonial traffic in beaver pelts, there is a hint of an underlying narrative of historical progress from economic to symbolic forms of animal capital (linked to larger narratives of progress from colonial violence to postcolonial reconciliation and from industrial to postindustrial modes of production). There is a suggestion, in other words, that through the progress of history Canadians have left behind not only a colonial past (metonymized by the violence of taking animals literally) but the messy necessity of any "real," material exploitation of nature altogether. Pheng Cheah argues that "the canonical understanding of culture in philosophical modernity" consists in the idealism of imagining that culture can transcend its "condition of miredness" in the political-economic field, which in the context of his argument is that of the nation-state.³⁷ While Cheah discerns a "closet idealism" in postcolonial discourses of migration and hybridity that valorize transnational mobility over national bondage, the hegemonic expression of the idea that culture can achieve "physical freedom from being tied to the earth" is, as Cheah is aware, that of neoliberal globalization.³⁸ It is this liberal fantasy of culturally transcending the materiality of nature that can be glimpsed, finally, in the mock biology of the Maclean's ad.

In his theorization of intangible or symbolic forms of capital accruing to signs of social status such as good taste and education, Pierre Bourdieu contends that "the fact that symbolic capital is less easily measured and counted than livestock" only makes its violence harder to discern.³⁹ For Bourdieu, symbolic capital is ultimately "a disguised form of physical, 'economic' capital."40 The distribution of forms of animal capital according to a narrative of historical progress—encouraging the sense that economic and symbolic orders of capital are successive rather than coeval—is a temporizing maneuver that works against recognition of their simultaneity, "disguising" the interconvertibility or supplementarity of their violence. Although a study of animal capital would seem to reinforce Hardt and Negri's claim that immaterial forms of intellectual and symbolic production have achieved historical hegemony over material modes of production—a shift traceable, among other places, in the etymology of "branding," which no longer predominantly signifies the literal act of searing signs of ownership onto biological property but rather signifies the symbolic production of affective trademarks—this book continuously strives to locate the economic or material exercise of power with which symbolic capital is coeval. While the postindustrial idioms of "branding" and "stock" have successfully dissociated capital from its material conditions and effects (stock, like branding, increasingly signifies a field of virtual speculation freed from capitalism's roots in biological property), one of the aims of this book is to restore a sense of capital's terrestrial costs.

The Ring of Tautology

To this end, this book struggles, unfortunately with no guarantee of success, against the abstract and universal appeal of animal and capital, both of which fetishistically repel recognition as shifting signifiers whose meaning and matter are historically contingent. Against his contemporaries, Marx argued that rather than having instrinsic properties, capital was the reified expression of historically specific relationships of labor and exchange. He dared to pose a simple question—What is a commodity?—and to unravel from this seemingly "obvious, trivial thing" the social relations between "men" that are occulted in the

apparent autonomy of the products of their labor. 41 "The animal," likewise, has circulated in cultural discourses of Western modernity as a generic universal—a "general singular" 42—whose meaning is ostensibly self-evident. Yet asking the simple question "What is an animal?" (as Tim Ingold does in an edited volume of that title) can similarly reveal that the meaning of the animal fluctuates with the vicissitudes of culture and history and, more particularly, with the vicissitudes of a species line that can be made either more porous or impregnable to suit the means and ends of power. That the animal has regularly been distended in the West to encompass racialized members of Homo sapiens, as the recent example of Abu Ghraib demonstrates, belies the essentialist tenet that the animal has fixed or universal referents.

David Harvey rues the "tendency in discursive debates to homogenize the category 'nature'... when it should be regarded as intensely internally variegated—an unparalleled field of difference."43 This book attempts to intervene into the homogenized category of nature by way of the more specific but equally generic category of "the animal." Derrida has eloquently declaimed the asininity of corralling "a heterogeneous multiplicity of the living" into "the strict enclosure of this definite article."44 My hope is that if animal and capital are read in genealogical relation to one another they will break down as monolithic essences and reveal their historical contingencies.

Yet even as the chapters in this book pit genealogical specificity against the generic force of their intertwined subjects, in the ring of animal capital can be heard a real threat of totality posed by the global hegemony of capital. There is meant to be a tautological ring to animal capital; the two words are supposed to sound almost, but not quite, the same. Indeed, much of this book is devoted to analyzing market discourses that seek to effect a perfect mimicry of animal and capital, including advertising campaigns depicting mobile phones and cars morphing into the instinctive species-life of monkeys or rabbits. A recent example of this mimicry appeared in "Nissan Animals," an ad campaign promoting the automaker's 4 x 4 vehicles. One fifty-second television ad in the campaign, aired in North America during the premier time slot of the 2007 Super Bowl, showed a series of Nissan 4 x 4s changing into and out of species shapes (a computer-generated puma,

spider, crocodile, and snake) as they traversed rugged off-road terrain. As the ad's tagline spelled out, Nissan animals are "naturally capable" of navigating a landscape that requires them to "shift capabilities."

The tautological ring of animal capital purposefully conjures Bhabha's theory of colonial mimicry as "the desire for a reformed, recognizable Other, as a subject of a difference that is almost the same, but not quite."46 Similar examples of market mimicry engaged in detail in later chapters will be seen to be as productively ambivalent in their rendering of species sameness-difference as Bhabha argues colonial discourses are in their rendering of race (race and species often function as substitutes, moreover, in the discursive repertoires of biopower). Yet the partial rather than perfect symmetry of animal and capital is meant to suggest something else, as well: the final inability of capitalist biopower to fully realize a perfect tautology of nature and capital. The nearsameness of the two sounded by the title will take on greater theoretical substance as I historicize the powerful mimicry of animal capital in relation to Antonio Negri's formulation of "tautological time," a time of real subsumption that corresponds, for Negri, to the penetration of biopower into the entire fabric of social life in capitalist postmodernity.⁴⁷ The ring in this book's title intimates, with simultaneously ominous and hopeful repercussions, that animal and capital are increasingly produced as a semiotic and material closed loop, such that the meaning and matter of the one feeds seamlessly back into the meaning and matter of the other. In the nauseating recursivity of this logic, capital becomes animal, and animals become capital. While the balance of power seems, ominously, to be all on the side of capital, it is crucial to also recognize the amplified vulnerability of capitalism in tautological times. Indeed, novel diseases erupting out of the closed loop of animal capital—mad cow disease, avian influenza—are one material sign of how the immanent terrain of market life becomes susceptible, paradoxically, to the pandemic potential of "nature" that early modern discourses of biopower originally sought to circumscribe (see chapter 4 and the book's postscript).48

Unlike Negri, however, I do not equate tautological time with post-modernity alone, and I will trace different biopolitical *times* of animal capital across Fordist and post-Fordist economies of power. As Fredric

Jameson notes in The Seeds of Time, the analysis of capitalism requires "the realization (strongly insisted on by Althusser and his disciples) that each system—better still, each 'mode of production'—produces a temporality that is specific to it."49 For Jameson, "mode of production" is here broadly conceived in relation to late capitalism, a period whose accelerated logic of "perpetual change" paradoxically produces an effect of profound stasis within which actual change (i.e., alternatives to capitalism) appears increasingly impossible.⁵⁰ The temporal effect of capitalist postmodernity is, in other words, that of the "end of History."51 The more specific temporal effect linked to the production of animal capital, I am suggesting, is that of tautological time. The time of animal capital recurs across Fordist and post-Fordist eras, exceeding historical containment within either one or the other and troubling many of their periodizing criteria. Yet this is not to say that animal capital is not rearticulated in relation to the shifting modes of production and technologies earmarked by the neologisms of Fordism and post-Fordism or that it remains a historical constant. It is precisely the trajectory of its proliferation from a partial to a more totalizing time that I am exploring here.

What appears in the tautological time of real subsumption, according to Negri, is a profound indifference between the time of capital's production and the surplus time of social life itself, or that life time left over after the so-called working day. In an era of real as opposed to formal subsumption, contends Negri, there is no longer any life time extrinsic to the time of capitalist production (an argument taken up in more detail in chapter 1). The tautological ring of this book's title seeks to make audible a related time of real subsumption effected by material and metaphorical technologies pursuing the ontological indifference of capital and animal life. The ecological Marxist James O'Connor holds that, in our current era, the reproduction of capital's conditions of production and the very biophysical conditions of "life itself" have become one and the same thing.⁵² The use of the sign of "the animal" is increasingly expedient in promoting a social fantasy of "natural capitalism."53 Concurrently, the substance of animal life materially mediates actual incarnations of this fantasy, as "more and more audacious manipulations of the genome"54 and as agri-, bio-, and genetic technologies

of farming, cloning, and "pharming" implant the logic of capital into the reproductive germ plasm and micromatter of life itself.⁵⁵ Whereas Negri initiates an "ontological turn" to joyously affirm the constituent power and collective substance of a counterhegemonic multitude, in what follows "the ontological" more pessimistically connotes the hegemonic effects of capital seeking to realize itself through animal figures and flesh.

If on the one hand Animal Capital presents the task of developing alternative genealogies not accounted for in the history of capitalism, then it also supplies a trope for a time of subsumption threatening a total mimicry of capital and nature, one well underway in a Fordist era of capitalism if not yet endemic in its effects. I am conscious, however, that the heuristic value of supplying a metaphor for capital as a biopolitical hegemon is potentially counteracted by the danger that it could reinforce the fetishistic effect of a coordinated global body of capitalism that in actuality does not exist. A perfect tautology of market and species life is never seamlessly or fully secured but is continuously pursued through multiple, often competing, and deeply contradictory exercises of representational and economic power. In actuality, the mimicry of animal capital is a "messy," contested, and unstable assemblage of uncoordinated wills to power, as well as immanent resistances to that power.56 David Harvey argues that the triumphalist effect of end-ofhistory global capitalism and oppositional discourses that inadvertently reify a capitalist totality are equally agents of the thinking that positions culture and nature in binary opposition and imagines that the former could possibly exercise a sovereign power of death over the latter.⁵⁷ It is therefore crucial that "animal capital" remain tensed between its alternate gestures, at once a metaphor that strategically amplifies the totalizing repercussions of capital's mimicry of nature in tautological times and a material history that tracks the contradictory discourses and technologies that can never perfectly render capital animal.

"In his mature thought," writes William Pietz, "Marx understood 'capital' to be a species of fetish." In the tautological time of animal capital, finally, a redoubled species of fetishism, or a metafetishistic species of capital, is at stake. The analogy of commodity fetishism

becomes powerfully literal, and in this sense metafetishistic, when commodities are explicitly produced or worshiped as animal. This becomes clearer when one recalls, as William Pietz does, the Enlightenment discourse of primitive religion informing Marx's concept of commodity fetishism.⁵⁹ "Fetishism was defined as the worship of 'inanimate' things even though its paradigmatic historical exemplifications were cults of animate beings, such as snakes," notes Pietz.60 "The special fascination that Egyptian zoolatry and African fetishism exerted on eighteenthcentury intellectuals," he adds, "derived not just from the moral scandal of humans kneeling in abject worship before animals lower down on the 'great chain of being,' but from the inconceivable mystery (within Enlightenment categories) of any direct sensuous perception of animaterias in material beings."61 Marx's great insight, expressed in the analogy of commodity fetishism, is that the commodity is similarly charismatic in its lifelike effects, because in it "the social characteristics of men's own labour" appears "as objective characteristics of the products of labour themselves."62

Yet Marx's concept of commodity fetishism "bears an eighteenthcentury pedigree" inasmuch as it also endorses the enlightenment teleology embedded in a Eurocentric discourse of fetishism. 63 Indeed, Marx's genius in bringing European political economy and "primitive" religion together in the phrase commodity fetishism—a phrase calculated to break the irrational spell of both capitalism and religion and to jolt Europeans to their rational senses—has risked reinforcing a master narrative of European reason. The point I want to make here, however, is that what was for Marx an analogy is literalized in the mimicry of animal capital.64 Recall the "Nissan Animals" advertisement I referred to earlier in which 4 x 4 vehicles are depicted digitally morphing into animal signs (a snake, a spider, etc.) on their off-road trek. The suggestion is that the inner essence of the automobile becomes, for an instant, visible on the outside, revealing the machine's animating force to be, well, animal. In the currency of animal life, capital becomes most potently literal and self-conscious in its fetishistic effects.

Yet it is because animal capital constitutes such a literal or tautologous species of fetish that it is at the same time unusually visible and

vulnerable in its discursive operations. For this reason, it suggests a privileged site from which to critically grapple with the naturalizing forces of capitalism.

The Double Entendre of Rendering

The tautological ring of animal capital finds echo in the double entendre of another word in this book's title: rendering. Rendering signifies both the mimetic act of making a copy, that is, reproducing or interpreting an object in linguistic, painterly, musical, filmic, or other media (new technologies of 3-D digital animation are, for instance, called "renderers") and the industrial boiling down and recycling of animal remains. The double sense of rendering—the seemingly incommensurable (yet arguably supplementary) practices that the word evokes—provides a peculiarly apt rubric for beginning to more concretely historicize animal capital's modes of production.

The double entendre of *rendering* is deeply suggestive of the complicity of "the arts" and "industry" in the conditions of possibility of capitalism. It suggests a rubric for critically tracking the production of animal capital, more specifically, across the spaces of culture and economy and for illuminating the supplementarity of discourses and technologies normally held to be unrelated. Such an interimplication of representational and economic logics is pivotal to biopolitical critique, since biopower never operates solely through the power to reproduce life literally, via the biological capital of the specimen or species, nor does it operate solely through the power to reproduce it figuratively via the symbolic capital of the animal sign, but instead operates through the power to hegemonize both the meaning and matter of life.

The rubric of rendering makes it possible, moreover, to begin elaborating a biopolitical, as opposed to simply an aesthetic, theory of mimesis. In contrast to the literary-aesthetic approach modeled, for instance, by Erich Auerbach's seminal *Mimesis: The Representation of Reality in Western Literature* (1968), a biopolitical approach to mimesis suggests that textual logics of reproduction can no longer be treated in isolation from economic logics of (capitalist) reproduction. ⁶⁵ In the double en-

tendre of rendering, there is a provocation to analyze the discomfiting complicity of symbolic and carnal technologies of reproduction. Rendering thus also redefines mimesis beyond its semiotic association with textual or visual "reality effect[s]," as Roland Barthes puts it, by compelling examination of the economic concurrencies of signifying effects. 66 Although rendering expands the sense of mimesis beyond its canonical associations with realist rendition, market cultures' hot pursuit of the representational goal of realism via new technological fidelities will remain vital to its logic. So will other representational objectives and histories of mimesis, such as those accruing to biological tropes of "aping" and "parroting" mobilized by the racializing discourses of European imperialism and colonialism. Yet enlarging mimesis to include multiple representational objectives and histories is not in itself sufficient to counter its overdetermination by aesthetic ideologies invested in distinguishing culture and economy. Even Theodor Adorno and Max Horkheimer's concept of "the culture industry," which radically pronounces culture's imbrication in economy, is qualified by Adorno's remark that "the expression 'industry' is not to be taken too literally."67

A biopolitical theory of mimesis, by contrast, encompasses the economic modes of production evoked by the "literal" scene of rendering. The double sense of rendering implicates mimesis in the ontological politics of literally as well as figuratively reproducing capitalism's "social flesh" (in the words of Hardt and Negri). As I show in later chapters, the rendering of animal figures and animal flesh can result in profoundly contradictory semiotic and material currencies. Yet, rather than undercutting the hegemony of market life, the contradictions of animal rendering are productive so long as they are discursively managed under the separate domains of culture and economy. That said, the productive contradiction of animal capital's metaphorical and material currencies is constantly at risk of igniting into "real" social antagonism should their separate logics brush too closely up against one another. This is the volatile potential latent in the rubric of rendering.

Again, rendering indexes both economies of representation (the "rendering" of an object on page, canvas, screen, etc.) and resource economies trafficking in animal remains (the business of recycling animal

trimmings, bones, offal, and blood back into market metabolisms). Later chapters elaborate the double sense of rendering in the more affective terms of "sympathetic" and "pathological" economies of power. This terminology is indebted to Michael Taussig's formulation of "the magic of mimesis," the mysterious power of a reproduction to materially affect the thing it copies.68 Taussig recalls James George Frazer's anthropological study of sympathetic magic in The Golden Bough: A Study of Magic and Religion (1911), where Frazer describes, among other things, how sorcerers of Jervis Island in the South Pacific Ocean manipulate effigies in order to affect the subjects they resemble. As Taussig relates, "If the sorcerer pulled an arm or a leg off the image, the human victim felt pain in the corresponding limb, but if the sorcerer restored the severed arm or leg to the effigy, the human victim recovered" (49). Building on the two types of sympathetic magic distinguished by Frazer, "the magic of contact, and that of imitation," Taussig emphasizes "the two-layered notion of mimesis that is involved—a copying or imitation and a palpable, sensuous, connection between the very body of the perceiver and the perceived" (21-22). Rendering an object's likeness, in other words, is not sufficient to gain power over it; the power to affect the other also requires stealing a tangible piece of its body in order to establish a pathological line of communication between "original" and "copy." As Taussig suggests, mimetic power in this sense involves the magic of "the visual likeness" and the "magic of substances" (50).

In a similar vein, the rubric of rendering brings mimesis into sight as a "two-layered" logic of reproduction involving "sympathetic" technologies of representation and "pathological" technologies of material control. Taussig's notion of a two-layered economy of mimesis helps to counter aesthetic theories that reserve mimesis for representational practices tacitly held at a distance from the material exploits of a capitalist economy. However, there is also cause to be wary both of the ethnographic language of sympathetic magic that Taussig resuscitates and of his stated desire to reawaken appreciation for the "mimetic mysteries" in order to break the "suffocating hold of 'constructionism'" in the academy (xix). Such a desire suggests that exoticizations of the Other that the discipline of anthropology sought to purge, under the

pressure of poststructuralist and postcolonial theory, have the potential to reappear in sublimated form as a fascination with the alterity of mimesis itself. In contrast to the language of magic favored by Taussig, the language of "rendering" makes it harder to re-enchant mimesis.

A glance at the dictionary reveals that rendering encompasses a multiplicity of additional meanings and ranges in reference from the building arts (applying plaster onto brick or stone) to interpretive performance (rendering a musical score) to surrendering or paying one's earthly dues ("render unto Caesar what is Caesar's"). The rubric of rendering encompasses a cacophony of logics that exceed the "double entendre" this book explores. Consider, for instance, the case of "extraordinary rendition," otherwise known as "extreme rendering." Taking the 2001 attacks on New York's Twin Towers as license to use state-ofemergency measures in its war against terrorism, the U.S. Central Intelligence Agency justifies its extrajudicial transfers of suspected terrorists to third-party states known to inflict torture on detainees.⁶⁹ The racialized terrorist suspect is subject to a relay of power, facilitated by the rhetoric of rendering or rendition, in which hints of animal rendering insidiously blend with other political economies of sense. The physical work of pulverizing an animal body bleeds into the sense of rendering as a delivery of retributive justice, couched as the "return" of purported terrorists to torture cells in the lawless states from whence they supposedly sprang. Both of these connotations further bleed into the sense of "rendition" as an interpretive work of art to ultimately link the turning over of detainees with the production of culture, exciting an aesthetics of torture. Here rendering appears to signify the creative license of the powerful to interpret the law in (permanently) exceptional times. At the same time, extreme rendering circulates as code, in the techno-speak of 3-D computer animation, for the cutting edge of high-speed image processing. Biopower arguably hails from the cacophony of incommensurable carnal and cultural sense that rendition accommodates.

If every act of writing, every critique, produces a remainder, it is the excessive sense of rendition that is the remainder of this book's necessarily partial theorization of the double entendre of *rendering*. I inevitably boil down the politics of rendering itself by theorizing its doubleness,

given that it comprises much more than the logics of representation and recycling that I have singled out. However, these two logics are peculiarly apt, as I have noted, to the cultural and material politics of animal capital. Unlike critical race, feminist, postcolonial, and globalization theories, which variously engage with technologies of animalization in relation to racialized human subjects but rarely with reductions of animals themselves, the double entendre of rendering I evoke is designed to make "the question of the animal" focal. Again, Cary Wolfe makes a helpful distinction between the discourse of speciesism—a "constellation of signifiers [used] to structure how we address others of whatever sort (not just nonhuman animals)"—and the institution of speciesism.70 "Even though the discourse of animality and species difference may theoretically be applied to an other of whatever type," writes Wolfe, "the consequences of that discourse, in institutional terms, fall overwhelmingly on nonhuman animals."71 Similarly, while the practice of extraordinary rendition illustrates that the politics of rendering is not reducible to that of animal capital, like the "asymmetrical material effects" of speciesist discourse, the material violence of rendering arguably falls most heavily on animal life.72

Rendering As Critical Practice: Discourse Analysis, Distortion, Articulation

Biological and genetic "stock" rendered from animals materially and speculatively circulates as capital even as animals appreciate in value as metaphors and brands mediating new technologies, commodities, and markets. Yet the market's double stock in animal life has persistently eluded politicization, possibly because so much is at stake. For the biopolitical interpenetrations with substances and signs of animal life that help to secure capitalism's economic and cultural hegemony also betray its profound contingency on nonhuman nature. If animal life is violently subject to capital, capital is inescapably contingent on animal life, such that disruptions in animal capital have the potential to percuss through the biopolitical chains of market life. One task of the critic of animal capital, then, is to make their contingency visible. This involves pressuring the supplementary economies of rendering into incommensurability and antagonizing animal capital's productive contradictions.

Whereas the previous section introduced rendering as hegemonic logic, this section examines how rendering might also serve as a generative trope for counterhegemonic forms of critical practice that strive to illuminate the contingency of animal capital to political effect.

Given that I have sketched rendering as a logic of biopower or discursive power, its counterhegemonic deployment can be most broadly identified with critical discourse analysis and immanent critique, albeit with some qualifications. Postcolonial theorists such as Edward Said, Gayatri Spivak, and Homi Bhabha and post-Marxist theorists such as Ernesto Laclau and Chantal Mouffe have been influential in expanding Foucault's insights to an analysis of the discursive conditions of imperialism and colonialism and the constitutively discursive character of the social field, respectively. Like the many efforts of discourse analysis inspired by them, rendering draws attention to the role that symbolic power plays in the reproduction of market life, resisting the Marxian tendency to privilege economic relations of production as the empirical "truth" underlying the cultural superstructure. Post-Marxist discourse analysis emerged, after all, in resistance to the perceived economic essentialism of Marxist critique and to the conception of ideology as false consciousness accompanying it. Foucault's remark that the "control of society over individuals is not conducted only through consciousness or ideology, but also in the body and with the body"73 challenges a Marxist paradigm of critique by locating ideology not in the so-called cultural superstructure of ideas but in the body, that is, in a biological substrate of desires and life drives previously held to be "beneath" ideology, or pre-ideological. The rethinking of ideology as constitutive of social-bodily existence is crucial to the study of animal capital, particularly in light of the conflation of "the animal" with the ostensibly pre-ideological realm of the body, instinctual drives, and affect in cultural discourses of the West (something I will return to shortly).

However, rendering also suggests a critical practice alert to the risk of "semiological reduction" run by overly culturalist strains of discourse analysis.⁷⁴ It provides a trope for a cultural-materialist analysis that navigates a fine line between reductively materialist and reductively culturalist approaches to the field of capital. Rendering's evocation of a literal scene of industrial capitalism is constantly at risk of implying recourse

to an economic reality underlying the ideological smokescreen of animal signs; that is, it is at risk of sliding back into an essentialist Marxist materialism. Yet it is a risk that I hazard in order to avoid the alternate pitfall of overcompensating for the economic essentialism of Marxist criticism by describing all of social space in terms of a linguistic model of discourse. Following from Saussure's claim that "language is a form and not a substance," semiological approaches that read capitalism strictly as an economy of signifiers conflate an economic logic of exchange value with a logic of linguistic value conceived as empty and formal, one in which the contingent "substance" of the sign is reduced to irrelevance.⁷⁵

For this reason, argues Régis Debray, the semiotic turn instigated by Saussure frees thought from the "referential illusion" only to itself fall prey to a fantasy of pure code. 76 Debray contends that a "mediology" is needed to remedy the "semiotic illusion, in order to again find a strong reference to the world, its materials, its vectors and its procedures."77 In his biopolitical approach to naturalist discourses in turn-of-thecentury North America, Mark Seltzer likewise cautions against the "sheer culturalism" of "proceed[ing] as if the deconstruction of the traditional dichotomy of the natural and the cultural indicated merely the elimination of the first term and the inflation of the second."78 "Rather than mapping how the relays between what counts as natural and what counts as cultural are differentially articulated, invested, and regulated," notes Seltzer, "the tendency has been to discover again and again that what seemed to be natural is in fact cultural."79 Rendering resists both the "sheer culturalism" of reading animals as empty signifiers and the converse essentialism of reifying them as natural signs, following Seltzer's insight that biopower cannot be grasped by approaches that reduce the natural to the cultural, or vice versa.

If there is still critical mileage to be coaxed out of the audio effects I have been sounding in this Introduction, I would like to propose "distortion" as the form that a dialectical practice inspired by the double entendre of rendering might take once it recasts itself in the mode of immanent critique, relinquishing the possibility of a clear oppositional vantage point. Distortion, according to the Oxford English Dictionary, involves "a change in the form of (an electrical signal) during transmis-

sion, amplification, etc."⁸⁰ Distortion disrupts what Debray calls a telecom model of "painless transmission"⁸¹ by routing the semiotic vector of an animal sign through a material site of rendering, for example, diverting film's time-motion mimicry of animal physiology through the carnal space of the abattoir (see chapter 2), or the animal signs in a Canadian telecommunications ad campaign through neocolonial bushmeat and war economies (see chapter 3). Like Mary Louise Pratt's notion of "codeswitching," distortion connotes a strategic switching back and forth between rhetorical and carnal modes of production of animal capital with the aim of interimplicating and crossing their signals.⁸²

As a model of immanent critique, distortion resists privileging either literal or rhetorical sites of rendering as truer vantage points from which to reckon with animal capital, emphasizing instead that both are effects of power. Like straws in water, there is no point from inside an immanent field of power at which the transmission or reception of animal signs can ever be transparent, or "straight." Literality is only an *effect* of transparency, or, as Laclau and Mouffe put it, "Literality is, in actual fact, the first of metaphors." Conversely, while rhetorical power can efface its material conditions, it can never actually transcend them. By continuously interimplicating the double senses of rendering, ostensibly literal currencies of animal life, such as meat, can be shown to be veined through and through with symbolic sense, while the mimetic effects of filmic or digital animations, for example, can be pressured to reveal their carnal contingencies.

This leads to a final term crucial to conceptualizing rendering as a counterhegemonic critical practice: articulation. Laclau and Mouffe's theorization of articulation remains one of the most compelling contemporary efforts to think contingency. Write Laclau and Mouffe, "We will call articulation any practice establishing a relation among elements such that their identity is modified as a result of the articulatory practice." In contrast to identity politics, which spawn the sense that subjects are pre-given to representation, "politico-hegemonic articulations" acknowledge that they "retroactively create the interests they claim to represent" (xi). Laclau and Mouffe begin from the antiessentialist premise that social identities do not preexist their social articulations.

The problem with dialectical thinking, in their view, is that it has historically sought to reduce social life to one essential, underlying logic (for Hegel, the historical unfolding of Spirit, for Marx, class consciousness as the motor of material history) and to reconcile antagonistic social elements within the telos of a unified social whole. By contrast, in the radical "logic of the social" that they theorize, "there is no single underlying principle fixing—and hence constituting—the whole field of differences" (3, 111). The social field is constituted, rather, by competing articulations vying for hegemony and is irreducibly antagonistic, or "pierced by contingency" (110).

All that distinguishes rendering as hegemonic discourse from rendering as critical practice, ultimately, is its self-recognition as a politically motivated articulatory practice. Without this self-reflexivity, the act of bringing disparate, unlikely things together under its rubric risks becoming a metaphorical exercise in suggesting that they share an underlying, unifying likeness rather than an effort to make their contingent character visible. As Seltzer writes, the "generalized capacity of combining together' dissimilar powers and objects, drawing into relation and into equivalence 'distant' orders of things such as bodies, capital, and artifacts: this logic of equivalence is the 'classic' logic of the market and of market culture."85 Against the metaphorical temptation to reduce difference to sameness and against, too, the temptation to empirically justify the connections rendering makes, the critical practice of rendering needs to self-critically foreground that it also rhetorically renders relationships. Rendering as critical practice, no less than rendering as hegemonic logic, is a discursive mode of production, with the difference that it seeks to produce counterhegemonic rather than hegemonic relationships and effects. Lest its own motivated labor of making connections between symbolic and carnal economies of capital be fetishistically erased by the appearance that they are simply revealed, the critical practice of rendering needs to vigilantly foreground its own articulatory power.

This is not to say that there is no historical basis for the linkages rendered in later chapters between cinematic culture and animal gelatin or between animal ads and resource politics in the Eastern Congo; the actual metaphorical glue that binds them within a shared logic is the "concrete universal" of capital. 86

Animals in Theory

Two rich veins of poststructuralist thought have played a particularly influential role in the proliferation of theoretical engagements with "the animal" in the late twentieth and early twenty-first centuries. The first vein is Derridean, the second Deleuzian. In both, animals appear as focal figures of immanent life (in contrast to metaphysical Being), and thus to a large extent tracking the figure of the animal through each vein of thought amounts to tracking two intellectual genealogies of the idea of immanence.

In the first vein, we encounter Derrida's concept of "animot" as the animal trace of the text; in the second we encounter Gilles Deleuze and Felix Guattari's concept of "becoming-animal" as a figure of deterritorialization and multiplicity. Rather than attempting a thorough comparative review of the role that these and other animal figures play in Derridean and Deleuzian critique, I want to briefly examine some of the critical ramifications—in relation to this book's concerns with animal capital—of articulating animal life to the concept of "hauntology" (Derrida) and to the idea of "becoming" as pure potential or virtuality (Deleuze and Guattari). The concepts of hauntology and becoming purportedly unsettle the ontological premises and power structures of Western culture. Yet articulating the alternative ontologies they name to and through animal signs has profound implications for their effectiveness in this regard. For starters, the figures of animal immanence posed by each are politically unsettling only to the extent that the dominant means and ends of power indeed correspond to a "metaphysics of presence" (Derrida) and to "molar" states of Being (Deleuze and Guattari). As Slavoj Žižek contends, however, the contemporary terrain of capitalism throws these assumptions into question inasmuch as it resembles what Deleuze and Guattari refer to as a deterritorializing "plane of immanence" and traffics in spectral currencies that in effect "deconstruct" distinctions between the living and the dead. 87 Is not "the impersonal circulation of affects," asks Žižek, "the very logic of publicity, of video clips, and so forth in which what matters is not the message about the product but the intensity of the transmitted affects and perceptions?"88 Žižek goes so far as to argue that there are "features that justify calling Deleuze the ideologist of late capitalism."89 Whether the same dare be said of Derrida depends, in the context of this discussion, on the différance (or lack thereof) that a logic of spectrality poses to animal capital.

Let me backtrack to the philosophical discourse of immanence announced in the West by Nietzsche's radical proclamation of the death of God, one carrying a note of joyous affirmation that peals through the Deleuzian lineage (from the pre-Nietzschian writings of Spinoza to the work of Hardt and Negri). Nietzsche sought the earthly repatriation of powers of creation that had been ceded to a metaphysical Being, not only the Being of God but also that of his earthly representative, Man. Zarathustra is able to converse with animals, whose immanent existence is iconic in the work of Nietzsche, because he represents the overcoming of the transcendental authority of both God and Man, that is, he represents the Overman. 90 In the work of Foucault, the refusal of the metaphysical foundations of Truth, History, and Subjectivity and the proclamation of the death of Man by virtue of his recognition as a historically contingent "invention of recent date" rearticulate a Nietzschian discourse of immanence. 91 It is in the writings of Deleuze and Guattari, however, that resistance to metaphysical paradigms of Being is formulated as an involuntary force of becoming-animal.

For Deleuze and Guattari, becomings constitute states of pure potentiality occurring in between those fixed, identifiable states of Being they call "molar." Becoming-animal is not to be confused with actual animals, then, and certainly not with those "Oedipal pets" that represent for Deleuze and Guattari the most contemptible breed of molar, domesticated animal. Nor can becoming-animal be understood without understanding the role that affect plays in the work of Deleuze and Guattari. Affects are the prime movers on the "plane of immanence," the "pure intensities" that, like free radicals, are never permanently attached to molar organisms but are rather the virtual attractors of their potential becomings: becoming-woman, becoming-animal, becoming-molecular. (43). Unlike emotion, affect "is not a personal feeling, nor is it a characteristic; it is the effectuation of a power of the pack that throws the self into upheaval and makes it reel" (240). Affect, for Deleuze and Guattari, is contagious; it congregates into multiplicities

that travel in "packs" (swarms of bees, rat packs, bands of werewolves), and it crosses species boundaries that are normally ontologically policed. The state, the family, and other "apparat[i] of capture" seek to domesticate the disorganizing power of impersonal affect by reducing it to personal emotion working in the service of normative social relations and identities (444).

For Deleuze and Guattari, affect is especially, quixotically, configured as an "animal rhizome" — a brush of fur, a scent, or spoor triggering the "nonvoluntary transmutation" of being into becoming and opening a "line of flight" out of fixed ontologies (47, 269, 277). Far from being politically motivated, the micropolitical force of affect described by Deleuze and Guattari-who in their writings are as fascinated with its feral carriers as they are contemptuous of the domesticated "house dogs" that guard against it (244)—is cast as a "nonvoluntary" force springing from the irrepressible multiplicity of heterogeneous nature. In other words, the concept of becoming-animal arguably fetishizes affect as an animal alterity that eludes rather than enters into the calculations of power. More problematically, because becomings signify for Deleuze and Guattari a virtual state of pure potential as opposed to a state of historical actuality, the figure of animality to which affect is attached is rendered profoundly abstract.93 Brian Massumi reminds us that, for Deleuze, the virtual and the abstract are "real" and not to be confused with popular notions of virtual reality.94 Yet Massumi's own rearticulation of the "incorporeal materialism" of the body in a virtual state of becoming similarly hinges on a distinction between the body as a form of energy (affect) and the body as matter.⁹⁵

In the context of animal capital, there is a great deal at stake in romanticizing affect as a rogue portion of pure energy linked to animality as a state of virtual rather than actual embodiment. This is not because one could argue that affects and becomings have been successfully captured and reduced "to relations of totemic or symbolic correspondence" in the service of capitalism, since such an argument assumes, along with Deleuze and Guattari, that the primary aim of power is to "break" becomings. 96 Rather, it is because the field of power can no longer be clearly identified with a restriction on becomings. In other

words, forces of capital—especially those transnational forces delinked from the mediating form of the nation-state—no longer achieve hegemony solely by means of breaking the "unnatural participations" and "unholy alliances" across heterogeneous series that Deleuze and Guattari cherish as transgressive but also by inducing them (241–42).

At the very least, affect as an authentic animal alterity is impossible to distinguish from the intensities unleashed by capitalism. On what grounds, after all, does one definitively distinguish "real" becomings from the pseudo- or simulated becomings spawned through the sorcery of market culture? As Žižek asks:

And what about the so-called Transformer or Animorph toys, a car or a plane that can be transformed into a humanoid robot, an animal that can be morphed into a human or robot—is this not Deleuzian? There are no "metaphorics" here: the point is not that the machinic or animal form is revealed as a mask containing a human shape but, rather, as the "becoming-machine" or "becoming-animal" of the human.⁹⁷

Equating cultural and economic hegemony with the repression of becomings thus risks, as Hardt and Negri suggest, missing "the contemporary object of critique": capitalism as an empire that also achieves hegemony through rhizomatic means. ⁹⁸ The ineffectiveness of which Hardt and Negri accuse postmodernist theory in this sense also extends to the "radicle-system" of becomings theorized by Deleuze and Guattari, ⁹⁹ which may not be as undermining of power as it appears to be: "Postmodernists are still waging battle against the shadows of old enemies: the Enlightenment, or really modern forms of sovereignty and its binary reductions of difference and multiplicity to a single alternative between Same and Other. . . . In fact, Empire too is bent on doing away with those modern forms of sovereignty and on setting differences to play across boundaries." ¹⁰⁰

On this note, let me turn to the other, Derridean, lineage that has also exerted tremendous influence upon late twentieth and early twenty-first-century engagements with "the animal." While there are any number of potential entry points into the discourse of immanence it poses, I will begin with Martin Heidegger's thesis that "the animal is poor in world" and with Derrida's confrontation of that thesis. ¹⁰¹ Heidegger's

own critique, or "destruction," of an ontotheological idea of Being through his formulation of human Dasein ("being-there") as an indwelling in the house of language is a crucial forerunner of deconstruction and seminal to efforts to think immanence in the West. 102 Nevertheless, Derrida takes Heidegger to task for still seeking to demarcate "an absolute limit between the living creature and the human Dasein" based on the animal's lack of language. 103 The "poverty" in world of the animal is, for Heidegger, that of a being-in-the-world incapable of objectively apprehending world as world, one strictly differentiated from the Dasein of the human, who, as a language-being, is "worldforming."104 According to Michael Haar, for Heidegger "the leap from the animal that lives to man that speaks is as great, if not greater, than that from the lifeless stone to the living being."105 The idea of animal immanence as an unreflective or unconscious rather than conscious being-in-the-world is echoed in Georges Bataille's statement that animals are "in the world like water in water." 106

Derrida's resistance to the philosophical doxa that language constitutes an absolute boundary between animal and human involves identifying animals with the immanent otherness of logos, something he achieves by suggesting that tropological sites of language, specifically metaphor, are animal. In an essay written over a decade after Of Spirit: Heidegger and the Question (1987), Derrida devises the neologism "animot" to capture the identity of animality and metaphoricity. 107 Derrida is not alone in his fascination with the (ostensible) animal alterity of metaphor, that is, with seeing in figurative language an affective trace of animality that undermines Western logocentrisms. John Berger, in his famous essay "Why Look at Animals," critiques the marginalization of animals in capitalist modernity by invoking a precapitalist relation of human and animal mediated in the first instance by metaphor. Writes Berger: "The first subject matter for painting was animal. Probably the first paint was animal blood. Prior to that, it is not unreasonable to suppose that the first metaphor was animal."108 By tracing an ancient bloodline between metaphor and animal life, however, Berger risks obscuring how the rendering of animals, both metaphorically and materially, constitutes a politically and historically contingent, rather than a primal or universal, relationship. Perhaps it is apt, then, to borrow from Berger to suggest that the animal figures in Derrida's corpus also come dangerously close to functioning as "first metaphors" for the ineluctable traits of deconstruction, primalizing the tracings, spacings, and supplements deigned to estrange every claim of presence. 109

Consider the covert figure of animality lurking in what had been Derrida's long-awaited reading of Marx, Specters of Marx: The State of the Debt, the Work of Mourning, and the New International (1994). There, slippage between signs of spectrality and animality risks annulling Derrida's efforts in a later text—"The Animal That Therefore I Am (More to Follow)" (2002)—to deconstruct the reductive category of "the animal" in favor of "an irreducible living multiplicity of mortals." Contrary to his invocation of the "unprecedented" and "monstrous" conditions facing animals in the zoos, feedlots, abattoirs, holding pens, corrals, and laboratories of Western culture, 111 Derrida's deconstruction of commodity fetishism in Specters of Marx risks putting a materialist critique of life in biopolitical times under suspension by virtue of formulating the "bodiless body" of the specter and animal life under the same logic. 112

In Specters of Marx, Derrida contends that the fetishism of commodities is not a false effect that can be exorcised by uncovering the underlying "truth" of capital, as Marx suggested, but is rather an effect haunting every presence, every use value, and every mode of production. There is no production, Derrida contends, that is not riddled with a fetish or "spectrality effect." 113 "As soon as there is production," he writes, "there is fetishism" (166). If there is an end to spectral special effects, declares Derrida, it is "only beyond value itself" (166). It is against a "Marxist ontology" that has sought to conjure away the spectral illusions of capital "in the name of living presence as material actuality" that Derrida proposes the notion of an always-already haunted ontology, or hauntology (105). One of the potential dangers of Derrida's deconstruction of fetishism as a spectrality effect specific to market culture, however, is a dilution of the historical contingency of capitalism within an a priori, transhistorical order of inevitably haunted production. Troubling, too, is how Derrida covertly articulates now universal and inevitable spectrality effects to the figure of a compality.

Signs of animality steep Derrida's close engagement with the famous passage in the first volume of Capital, in which Marx describes the transformation of use values into exchange values (a transformation that in many translations is likened to a table-turning séance). The fabulous table appears in the section titled "The Fetishism of Commodities and the Secret Thereof," where Marx writes: "As soon as it [the table] emerges as a commodity, it changes into a thing which transcends sensuousness. It not only stands with its feet on the ground, but, in relation to all other commodities, it stands on its head, and evolves out of its wooden brain grotesque ideas, far more wonderful than if it were to begin dancing of its own free will."114 Purportedly paraphrasing "as literally as possible" the scene in which the commodity assumes life, Derrida writes that the table "seems to loom up of itself and to stand all at once on its paws."115 Paws? The table "has become a kind of headstrong, pigheaded, obstinate animal that, standing, faces other commodities," writes Derrida (152). Again, "Become like a living being, the table resembles a prophetic dog that gets up on its four paws" (153). 116 In arguing against fetishism as a historically particular effect of capitalist production, Derrida insinuates tropes of animal life to raise spectrality as a primal différance immanent to all earthly existence. Derrida particularly favors the figure of a "headstrong dog," possibly because dog, a semordnilap for god, helps him to configure an immanent versus transcendent ontology (155).

Derrida thus insinuates the image of a compulsive becoming-animal into Marx's passage under the guise of a "literal" paraphrase. Yet it is widely held that Marx inscribed the fetishizing movement as an impersonation, or anthropomorphization, of the commodity. The sensuous use value that at first stands on all fours (the quadruped posture of the table in Marx's passage is at least, if not more, suggestive of animal life than the imposture of exchange that Derrida metaphorizes as animal) is overruled by the "grotesque" hegemony of abstract exchange. Inverting the usual sense of the passage, however, Derrida animalizes the spectral ontology of the commodity. He identifies animal life not with the four-legged figure of use value that is hamstrung and drained by an abstract logic of exchange but with the "pigheaded" apparition, with exchangeability as a pugnacious potentiality immanent to value

itself. It is by configuring exchange as an animal alterity that precedes and exceeds the historical hegemony of capital that Derrida deconstructs the specific critique of commodity fetishism and develops a global logic of spectrality in its place.

The draining of historical materiality out of the sign of animal life risked by Derrida's conflation of animality and spectrality also threatens the animal autobiography he initiates in "The Animal That Therefore I Am (More to Follow)." Although Derrida starts this essay with a striking encounter between himself as he emerges from the shower and his cat—"a real cat," he insists, not "the figure of a cat"118—she quickly dissipates into spiritualistic terms deeply resonant with those Derrida deploys to describe both the becoming-animal of the commodity and the visitation of the ghost of Hamlet's father in Shakespeare's play. Specters of Marx opens, after all, with a meditation on the ghost of Hamlet's father, in which Derrida describes him in commodity terms as a sensuous non-sensuous "Thing that is not a thing." 119 The ghost of Hamlet's father is able to appear on the phenomenal stage, claims Derrida, only by donning a body "armor" or "costume," a "kind of technical prosthesis" that constitutes "a body foreign to the spectral body that it dresses" (8). Focal to the prosthetic appearance of the specter, moreover, is what Derrida terms its "visor effect," its unsettling gaze through slitted head armor (7). Pivotal to the spectral visitation, in other words, is the visual sense that "this spectral someone other looks at us, [and] we feel ourselves being looked at by it, outside of any synchrony, even before and beyond any look on our part, according to an absolute anteriority" (7).

Similarly, Derrida's cat is staged within the scene of an "animal-séance," a charged locking of gazes in which the human, in this case Derrida himself, is "caught naked, in silence, by the gaze of an animal, for example the eyes of a cat...the gaze of a seer, visionary, or extralucid blind person." His cat is introduced, that is, within the same logic as the specter. As with the ghost of Hamlet's father, the scene turns on a visor effect, on the startling anteriority of a spectral gaze that, as Derrida puts it in this instance, spawns the abyssal situation of "seeing oneself seen naked under a gaze that is vacant to the extent of

being bottomless" (381). The spectral animal visually channels the disquieting half-presence of a "life" never cosubstantial with terrestrial Time, History, and Being. 121 By framing his encounter with his cat in the same terms he uses to frame the ghostly visitation of Hamlet's father, Derrida risks collapsing the material difference between the body of an actual animal and the prosthetic armor of a fictional specter, conflating the body of his cat with the "paradoxical corporeality" of the prosthetic dress that the spirit of Hamlet's father dons in order to make an appearance on the historical stage. 122

Meeting the "bottomless gaze" of a spectral animal is, for Derrida, a deeply ethical encounter capable of dislocating the composure and presumed priority of the human subject. 123 "As with every bottomless gaze, as with the eyes of the other, the gaze called animal offers to my sight the abyssal limit of the human," he writes (381). Yet this ethical encounter with animal alterity is, as Rey Chow says of critical theory's fascination with human alterity, deeply idealistic. 124 The "real cat" that Derrida takes pains to distinguish from a simply tropological function is transubstantiated, despite his protestations, into one figure in a line of suspenseful figures emptied of historical substance and summoned to deconstruct onto the ological "sign[s] of presence." 125 Is a materialist critique of life in biopolitical times—a politics of what Derrida himself raises as "the industrial, mechanical, chemical, hormonal, and genetic violence to which man has been submitting life for the past two centuries"126—possible when animals are summoned as specters with at best "an appearance of flesh" on their "bodiless body," when they are assigned to a limbo economy of life and death and thus positioned as never fully subject to histories of violence and exploitation?¹²⁷ Does not thinking of the animal as specter risk depoliticizing the argument that Derrida simultaneously makes in "The Animal That Therefore I Am" for animals as mortal creatures vulnerable to the capitalizing machinery of the past two centuries? If on the one hand Derrida initiates * politics of animal sacrifice specific to "carno-phallogocentric" cultures of the West, 128 on the other hand he remains transfixed with animals as first metaphors for différance as an uncanny force undermining ontological discourses in the West, including Marxist ontology. Derrida's cat—herself partly an engineered product of material institutions of pet ownership that Derrida occludes by declaiming her "absolute alterity" 129—is ultimately suspended as a historical subject and rendered an arch-figure of deconstruction.

I do not take issue with Derrida's efforts, alongside those of theorists such as Paul de Man and Hayden White, to undermine metaphysical truth claims by insisting that they are ineradicably haunted with traces of the tropological. What is at stake, rather, is how the tropological trace, supplement, or specter may itself be surreptitiously reified through its articulation to talismanic signs of animality. For the metaphors of the "pigheaded" animal and the "prophetic dog" that lace Derrida's deconstruction of the Marxian discourse of fetishism, and that animate the notion of hauntology he offers in its stead, are far from transparent. That the animal specter may itself covertly function as a fetish within deconstruction (a site where the transcendent foundations that deconstruction challenges are reconstituted in the immanent form of animalgods) is matter for concern, given that articulations of animality and spectrality can, on the one hand, lend figures of deconstruction a character of compulsive inevitability and, on the other, drain animals of their historical specificity and substance.

Allow me to pinpoint, before moving on, how Derrida's conflation of spectrality and animality indeed puts him at risk, as Žižek says in relation to Deleuze, of being an "ideologist of late capitalism." The Animorph toys cited by Žižek to back his claim that Deleuzian "becomings" ideologically resonate with actual capitalism could also be cited in relation to Derrida's concept of "animot" and his meditations on spectral bodies. According to the logic within which Derrida invokes animal life, specters simply are (or rather appear, given that the ontologically self-evident is precisely what an apparition perturbs). To suggest that specters perturb hegemonic structures of power assumes that they appear out of some ghostly volition from within immanent fissures in architectures of presence. The rubric of rendering suggests, by contrast, that capitalism is biopolitically invested in producing animal life as a spectral body. Whether it be as semiotic or as biological stock, whether on reserve as mediatized sign or as material, ani-

mals and other signs of nature are kept in a state of suspension that Derrida himself characterizes as a state of "interminable survival." ¹³⁰ It is difficult to dissociate the logic of the specter from a biopolitical logic of capitalization bent on producing, administering, and circulating life as an undying currency. Capital, in other words, is arguably less invested in the metaphysics of presence that Derrida confronts than in the spectral logic of a "paradoxical corporeality" that infernally survives. ¹³¹ Derrida himself draws attention to a biopolitical violence constituted by the power to keep animal life in a limbo economy of interminable survival, one equal to if not greater than the violence of liquidating animal life and extinguishing species. Nor is he unconcerned with the rising hegemony of "techno-tele-discursivity" and spectralizing media. ¹³² Whenever Derrida historically engages with the field of capitalism, that is, he acknowledges that a spectral materiality is often the very currency of exchange rather than a source of disturbance.

Taking recourse once again to the argument that Hardt and Negri leverage in Empire, the logic of the specter offers little resistance to market cultures geared toward biopolitical production. Globalizing market cultures advance biopolitically, argue Hardt and Negri, by exploiting and producing the aporias, ambiguities, and in-between states that postmodernist and hybridity theorists have deemed resistant. "The affirmation of hybridities and the free play of differences across boundaries," they write, "is liberatory only in a context where power poses hierarchy exclusively through essential identities, binary divisions, and stable oppositions."133 The logic of the specter, likewise, is perturbing only within a field of power invested in binaries of life and death, presence and absence, specie and speculative value—binaries that capital, in its "necromancy," has arguably always exceeded. 134 It is therefore crucial to consider that Derrida's animalséance may ideologically reinforce rather than trouble "the spectral reign of globalized capitalism." 135 That said, resisting the spectralization of animal life does not mean reverting to an equally perilous empiricism that would fixate on animals as carnal proof of presence. As the double sense of rendering suggests, the logic of the specter and the logic of the specimen (conceived as the reduction of animals to the ostensibly transparent literality of their bodies) are flip sides of animal capital and signal the double bind with which capital achieves a biopolitical lock on "life." If draining the historical substance out of virtualized animals represents one valence of rendering, recycling animals as mere material represents the other.

I have attended at some length to Derrida's work, given that it constitutes one of the most sustained ethical engagements with "the question of the animal." However, the spectral animal invoked by Derrida makes a significant reappearance in Akira Mizuta Lippit's Electric Animal: Toward a Rhetoric of Wildlife (2000), a book that, as I have noted, serves as something of a recurring foil for this book's theorization of animal capital. Like Derrida, who is fascinated with an animal specter that looks at Man from a paranormal time and space in which it is neither dead nor alive, Lippit theorizes animals as undying spirits that survive their mass historical "vanishing" within modernity to be reincarnated in the technological media. 136 Building on a Derridean notion of supplementarity, Lippit seeks to locate "traces of animality" in language and in the technological media, where a carnophallogocentric symbolic order is infiltrated by animal affect (26). Metaphor, suggests Lippit, is one such site. Like Berger and Derrida, Lippit encourages the sense that there is a primal link between "the animal and the metaphor." He fuses them in the notion of "animetaphor": "One finds a fantastic transversality at work between the animal and the metaphor—the animal is already a metaphor, the metaphor an animal. Together they transport to language, breathe into language, the vitality of another life, another expression: animal and metaphor, a metaphor made flesh, a living metaphor that is by definition not a metaphor, antimetaphor—'animetaphor'" (165). As animals "vanish" from historical modernity, continues Lippit, a spirit or trace of animality—ultimately an indestructible code—is salvaged by the technological media. He contends that cinema, even more consummately than linguistic metaphor, "mourns" vanishing animal life, that is, preserves or encrypts animality in its affective structure of communication (196). Cinema bypasses linguistic registers, Lippit argues, to communicate via rapid surges of nonverbal affect long associated in Western culture with an animal's electrifying gaze and sympathetic powers of communicability

(196). Cinema communicates, in other words, by means of affective transference in the form of the spell-binding gaze between animal and human that Derrida describes as an *animalséance*.

In proposing that an essence or structure of animal communication survives the historical disappearance of animals to transmigrate into the cinematic apparatus, Lippit takes to its logical conclusion the margin allowed in Derrida's text for reducing the body of the animal to a kind of stage armor or "technical prosthesis." Only by idealistically speculating in the animal as a rhetorical currency transcending its material body can Lippit propose such "a transfer of animals from nature to technology." Thus while *Electric Animal* provides a brilliant recapitulation of discourses of the "undying" animal in Western philosophical, psychoanalytic, and technological discourses, Lippit ends up *buying* the idea of the undead animal that he surveys and rearticulating it to an aesthetic theory of cinema. 139

Like Deleuze and Guattari, Lippit idealizes affect as a discharge of "pure energy." 140 To idealize affect as animal is, almost by definition, to naturalize it, deflecting recognition of affect as a preideological means and effect of power. As Jennifer Harding and E. Deidre Pribram argue, it is not only possible but imperative that "the critical component of power" be added to the theorization of affect.¹⁴¹ Their comparative analysis of Raymond Williams's "structure of feeling" and Larry Grossberg's "economy of affect" offers two examples of cultural materialists who resist the idealization of affect as an "anarchic excess threatening to disrupt the structures of power" and instead bring affect into view "as a technology of power." 142 Like Deleuze and Guattari, Grossberg differentiates between emotion and affect. Emotion, for Grossberg, is "the product of the articulation of two planes: signification... and affect."143 Affect, on the other hand, is dislodged "from the circuit of meaning relations" and occurs "prior to or outside of meaning."144 Yet to say that affect operates outside of meaning structures is not to say that it escapes relations of power, as Deleuze and Guattari (and Lippit) intimate. On the contrary, Grossberg contends that power is not toterminous with ideology or systems of signification alone but encompasses the production and circulation of asignifying energies. Rather

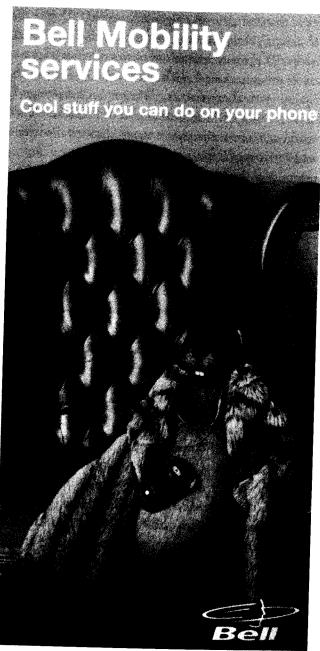


Figure 2. The new fur-clad class of subjects who enjoy virtual mobility. Bell Mobility, a division of Bell Canada, featured one of its famous spokesbeavers on a 2005 flyer.

neoliberal image of capital as a terrain of consumption transcending production (7).

An eclectic array of cultural discourses and material practices come under analysis in the chapters that follow. Each chapter, with the exception of the first, renders a counterhegemonic genealogy of animal capital in relation to technologies and discourses of mobility under the headings of "automobility," "telemobility," and "biomobility." By contrast, chapter 1, "Rendering's Modern Logics," is devoted to laying some historical groundwork for the odd couple that uncomfortably shares the modern lexicon of *rendering*: the business of animal recycling and the faculty of mimesis. It leverages their lexical connection into an argument for cohistoricizing the business of animal recycling and the economy of mimesis within a "tautological time" and logic of capitalist biopower (in the terms of Negri).

Chapter 2, "Automobility: The Animal Capital of Cars, Films, and Abattoirs," resists a stock image of Fordism by reckoning with the historically repressed (and unfinished) business of animal rendering. *Automobility* names a network of ideological and material exchanges entangling three Fordist moving lines in the politics of animal capital: the animal disassembly line, the auto assembly line, and the cinematic reel. The consumption of animal disassembly as affective spectacle through tours of the vertical abattoir, the material rendering of animal gelatin for film stock, and the mimicry of seamless animal motion integral to cinema's and automobiles' symbolic economies are interimplicated in this chapter. To resist consigning automobility to a distinct historical period of Fordist capitalism that has been ostensibly closed with the arrival of post-Fordist economies, the latter half of the chapter engages two contemporary advertisements for the Saturn Vue sports utility vehicle and examines the ways that automobility is rearticulated in the present.

As becomes clear in chapter 3, "Telemobility: Telecommunication's Animal Currencies," wherever affect is mobilized as a technology of capital there stands, it seems, an animal sign. This is the case with the discourses I analyze under the heading of "telemobility," discourses mimicking the communicability and ostensible immediacy of animal affect. Rather than equating telemobility discourse solely with the present, this chapter begins with Luigi Galvani's early experiments in animal

electricity in the 1780s. Animal electricity is not just the name Galvani gave to the lifelike spasms he induced in dead frog legs but a trope for the wireless long-distance communication with "animal spirits" he claimed to conduct through an invisible nervous fluid in animal bodies. From Galvani the chapter leaps to the pathological experiment posed by Thomas Edison's 1903 filmed electrocution of Topsy the elephant, a demonstration of electricity's ostensibly instantaneous communication of affect doubling as a public execution of a murderous animal. Chapter 3 takes up telemobility discourse as it is recalibrated in late capitalism, finally, by studying the advertising archive—stocked with signs of species biodiversity—of Telus Mobility Inc., Canada's second largest telecommunications corporation. Through the monkey metaphors that feature prominently in Telus's ads, the company's fetishistic discourse of telecommunication can be pressured to divulge the neocolonial relations of race, nature, and labor supporting it.

Chapter 4, "Biomobility: Calculating Kinship in an Era of Pandemic Speculation," engages with predictions by the World Health Organization and other agencies of a coming pandemic. A fixation in pandemic discourse on zoonotic diseases—diseases capable of leaping from animal to human bodies via microbial agents such as the H5Nr avian flu virus—is symptomatic of how formerly distinct barriers separating humans and other species are imaginatively, and physically, disintegrating under current conditions of globalization. This chapter examines how human-animal contact is constituted as a matter of global biosecurity in pandemic discourse as well as how zoonotic origin stories function to racially pathologize a specter of entangled ethnic-animal flesh. Yet if human-animal intimacy is pathologized in the cultural discourse of pandemic, it is contradictorily fetishized as an object of desire in concurrent cultural discourses. I examine the affective flip side of pandemic speculation in this chapter by looking at Gregory Colbert's popular photographic exhibit of human-animal intimacy, Ashes and Snow. Touring the globe in what Colbert calls his "nomadic museum," Ashes and Snow disseminates a vision of posthuman kinship composed of orientalizing images of entwined ethnic-animal flesh. The affects of fear and desire accruing to the permeability of the species line in the current era of globalization are tremendously productive of forms of

animal capital, as this chapter attempts to show, in large part because they serve as visceral means and effects of power.

Finally, the book's postscript, "Animal Cannibalism in the Capitalist Globe-Mobile," glances at the carnal tautology of animal cannibalism (the feeding of rendered remains of ruminants back to livestock), a practice that erupted into crisis in North America in 2003 with the discovery of several Canadian cattle with bovine spongiform encephalopathy, or mad cow disease. The closing of the U.S. border to Canadian beef and livestock, and the resurrection of discourses of national purity as both countries strove to exonerate themselves of the pathological excesses of animal capital, provide a parting glimpse into the complex material and cultural politics of rendering. As disease incubators threatening to expose capitalism's harrowing protein recycles, animals return in excess of the anticipated returns of rendering. If mad cow disease constitutes something of a privileged material symptom of rendering's logic, the cannibalism of representational economies in late capitalism that Jean Baudrillard terms simulacra is arguably its double. This book works from within the double binds posed by the supplementary economies of rendering and their harrowing symptoms while at the same time taking stock of possible openings for protest.

[Chapter 1]

Rendering's Modern Logics

To render: "to reduce, convert, or melt down (fat) by heating"; from Old French rendre, to give back. And indeed rendering does give back. Animal byproducts that would otherwise have been discarded have for centuries been rendered into fat which is an essential ingredient in the manufacture of soap, candles, glycerin, industrial fatty acids. More recently, animal protein meals have been produced as feed supplements for companion and meat-producing animals, poultry, [and] fish, and fat is used as a biofuel.

—NATIONAL RENDERERS ASSOCIATION INC.,
"North American Rendering: The Source of
Essential, High-Quality Products"

Michael Taussig opens Mimesis and Alterity: A Particular History of the Senses (1993) with the dizzying scene of "the ape aping humanity's aping" from Franz Kafka's short story "A Report to an Academy." The narrator in Kafka's story has been invited by the academy to give an account of his former life as an ape captured by Europeans on the Gold Coast. He recalls how, by mimicking his captors, he contrived to becomehuman, thereby escaping his fate as a colonial specimen destined for the Zoological Garden or the variety stage. The ape ends up, instead, a self-improved gentleman recalling his rapid evolution before an audience of similar gentlemen who are suddenly indistinguishable from the so-called performing monkey.

Confronted in this scene of aping by the profound *mise-en-abyme* of mimesis (not to mention by the confoundment of human and animal), Taussig professes renewed wonder at the mimetic faculty. Mimesis, he writes, is "the nature that culture uses to create second nature, the faculty to copy, imitate, make models." To his credit, Taussig complicates

the dazzling "nature" of the mimetic faculty—"if it is a faculty," he writes, "it is also a history" (xiv). Engaging with colonial histories of mimesis tracing back to moments of "first contact," Taussig draws attention to the profound overencoding of the mimetic faculty by modern discourses of primitivism (73). Nevertheless, Taussig's opening appeal in his book to approach "the inner sanctum of mimetic mysteries" with something akin to reverence arguably proves as seductive as his assertion of the historical character of mimesis.3 Contrary to his efforts to historicize mimesis within colonial discourses and relationships of power (as well as their postcolonial reversals), Taussig encourages readers to replace constructivist critiques popular in the current academy with an attitude of appreciative "wonder" at the power of mimesis (xix). This is at a time when the faculty of copying and imitation has never been more immanent, arguably, to the means and ends of capitalism. Indeed, within the context of animal capital—which at once connotes a metafetishistic time and terrain of capitalism and denotes actual traffics in animal signs and substances (see the Introduction)—this strikes me as nearly equivalent to asking us to abandon critique of capitalism's conditions and effects. For the power of the mimetic faculty and the fetishistic grip of naturalized capitalism cannot, arguably, be separated. Certainly Taussig knows this; his own work has been seminal to furthering the analysis of colonial capitalism's reliance on forms of mimetic as well as economic power and of colonized subjects' resistant deployments of mimesis.4 I agree with Taussig that the theoretical outlook of "constructionism" tends to uphold "a dreadfully passive view of nature." 5 But in his desire to give nature, in the form of the mimetic faculty, a more active role in culture than constructionism tends to allow, Taussig arguably swings too far the other way and idealizes mimesis as a force even a marvel-of nature.

In the Introduction to this book I proposed the rubric of rendering as an alternative to Taussig's language of mimetic reenchantment. Rendering also connotes "the faculty to copy, imitate, make models," as in the practice of rendering an object's likeness in this or that medium. Yet rendering simultaneously denotes the industrial business of boiling down and recycling animal remains, with the aim of returning animal matter to another round in the marketplace. In the Introduction I termed

this the "double entendre" of rendering, noting that while rendering has multiple senses, the accommodation of these two particularly divergent logics within the space of its one signifier is deeply suggestive of the complicity of representational and material economies in the reproduction of (animal) capital. In the supplementary workings of these two senses of rendering, mimesis comes into view as an immanent "faculty" of capitalism in the twentieth and early twenty-first centuries. In view of this contention, it becomes more difficult to grant the timeless innocence Taussig does to the mimetic faculty when he invokes "its honest labor [of] suturing nature to artifice." The rubric of rendering compels us to consider, instead, how the "honest labor" of mimesis—indeed, how the very idea of copying as an unmotivated, innocent faculty—itself becomes a fetishistic resource of capitalism (see, for instance, the tropes of biological aping in the marketing discourse of Telus Mobility Inc., closely analyzed in chapter 3).

What follows is not an attempt to demystify mimesis, in Marxist fashion, according to the belief that under the mystique of the mimetic faculty lie the real workings of power. My aim is to show, on the contrary, that mimesis constitutes the real workings of power, at least partially. The material rendering of animals is not the empirical "truth" that gives the lie to its other, the representational economy of rendering; the two are the immanent shapes mimesis takes in biopolitical times. In this chapter, then, I seek to lay some groundwork for studying mimesis in the theoretical and historical context of biopower. I propose to do so by way of an eccentric pair of genealogies. In the first genealogy, I track back from Taussig to examine an earlier fascination with the animal nature of mimesis in twentieth-century cultural theory, returning to the writings of Walter Benjamin, Theodor Adorno and Max Horkheimer, and Roger Caillois (rather than to the ancient discourses of Plato and Aristotle, where many Western histories of mimesis begin).7 The second genealogy traces the rise and rhetoric of industrial rendering as it emerged in Europe and North America around the turn of the twentieth century to capitalize on the surplus of animal waste.

What justifies this unlikely pairing of genealogies is not only the rubric of rendering, which the economy of mimesis and the business of animal recycling share, but also the perception that both constitute

age-old and universal practices. Such a perception obscures recognition of the historically specific field of power organized by rendering's modern logics. In repeatedly gesturing toward their archaic origins, the cultural and industrial discourses of rendering that this chapter traces encourage the sense (whether inadvertently or deliberately) that they are timeless and universal practices rather than historically embedded within the relations of capital. Against the naturalization of rendering's modern logics, this chapter works toward coimplicating them in the "tautological time" of capitalist biopower theorized by Antonio Negri. Building on Negri's suggestion that the history of capitalism undergoes a paradigmatic shift when the time devoted to capitalist production extends to cover the entire time of life itself, I propose that in the double sense of rendering a different but related history of biopower is inscribed.

Finally, as a methodological statement, the odd couple posed by this chapter's two genealogies of rendering bespeaks an effort to erode the disciplinary boundaries of the humanities and the sciences, boundaries that continue to bifurcate the study of culture and nature, culture and economy.

First Genealogy: Capitalist Mimesis

As suggested by the personability of the primate in the Kafka story relayed by Taussig, mimesis has been understood by most twentiethand twenty-first-century cultural theorists as a "two-way street" irreducible to either culture or nature, history or biology. Kafka's scene of aping brings mimesis into view as at once an animal faculty and a historical relationship of power, exceeding both essentialist and antiessentialist attempts to pin it down to one or the other.

However, an increasingly irreconcilable contradiction is arguably at play in the desire, evident in the work of theorists such as Taussig, Adorno, and Benjamin, to identify the oscillation or dialectic between history and biology that mimesis represents as a source of subversive alterity. This desire can be glimpsed in the fact that often when mimesis is invoked in twentieth- and twenty-first-century cultural discourse it is linked to a prehistoric figure of biological mimicry. Consider, for

instance, how Michel de Certeau traces the origins of mimesis to the fathomless "depths of the ocean" in *The Practice of Everyday Life* (1984).¹⁰ Although de Certeau is theorizing the resistant practice of bricolage ("making do") when he invokes the watery origins of life, bricolage turns on an idea of mimesis as a faculty continuous with "the immemorial intelligence displayed in the tricks and imitations of plants and fishes" (xx). De Certeau biologizes the tactical practice of making do by claiming that from "the depths of the ocean to the streets of modern megalopolises, there is a continuity and permanence in these tactics" (xx).¹¹ Intimating that the subversive potential of imitation is continuous with the deep nature of biological mimicry is a recurrent gesture within cultural discourses of mimesis in the twentieth century, one that contradicts their simultaneous efforts to historicize the contingency of mimesis and power.

The representation of mimesis as a dialectic between nature and culture was perhaps most persuasively articulated earlier in the twentieth century when an explosion of technological media (photography, film, radio, advertising) was arousing anxiety that the mimetic faculty might not in fact transcend its imbrications in capitalism's mass modes of reproduction.¹² The hopes of dialectical criticism were pinned to the mimetic faculty at the very moment, arguably, when the historical subsumption of its nature-culture dialectic into an immanent order of capitalism appeared all too possible. Taussig's engagement with mimesis in the "older" anthropological language of sympathetic magic has precedents in writings from this period (xiii). Walter Benjamin, cited heavily by Taussig, hinted in his 1930s writings that a sympathetic faculty for forging resemblances between unlike things can never be wholly denatured, not even through the instrumentalization of mimesis by the mass media of capitalism. In a famous passage in "The Work of Art in the Age of Mechanical Reproduction" (1936) in which he described the loss of aura—a loss that for Benjamin was symptomatic of capitalism's momentous historic reduction of mimesis to mere technological reproductions of likeness—he wrote that "to pry an object from its shell" is "to destroy its aura." 13 Benjamin's trope of a mollusk existence pried by technologies of mechanical reproduction from its biological environment implied that the mimetic faculty that capitalism threatens to denature archives the primordial origins of life itself. Yet although capitalism endangers the mimetic faculty by technologically harnessing it to mass reproduction (reducing the alterity of mimesis to the reifying order of the mimetological, to use a distinction later theorized by Derrida), ¹⁴ Benjamin invested hope in mimesis as an irrepressible biological inheritance destined to ultimately survive and subvert its instrumentality for anthropocentric capital.

On the one hand, Benjamin's work catches sight of mimesis as a political history flashing up in the moment of crisis provoked by capital's powers of mass reproduction. On the other hand, however, his work is prone to idealizing mimesis and to nostalgically evoking a "time immemorial" in which self and other, human and nonhuman, animate and inanimate, were linked by relations of mimetic resemblance rather than by relations of abstract equivalence.¹⁵ Taussig himself is wary of Benjamin's tendency to exoticize mimesis "in the dance and magic of the primitive world."16 In various short writings—"Doctrine of the Similar," "On the Mimetic Faculty," and "The Lamp," among others— Benjamin risks undermining the politicization of capitalist mimesis (of cinema, in particular) advanced in "The Work of Art in the Age of Mechanical Reproduction" by intimating that mimesis constitutes an innate biological compulsion, one threading back through an almost Lamarckian natural history. "The gift which we possess of seeing similarity," he writes, "is nothing but a weak rudiment of the formerly powerful compulsion to become similar and also to behave mimetically."17

It is important to note that linking mimesis to a prehistoric image of biological mimicry is well in keeping with Benjamin's contention that mimesis is the very means of dialectical movement across culture and nature (a movement policed and perverted by Enlightenment rationality and the reifying forces of capitalism). Benjamin saw mimesis as the spark that illuminates resemblances between culture and nature, in resistance to the Enlightenment reason that objectifies and polarizes them. In the same vein, mimesis is pivotal to the redemptive work of constellation, that practice of historical materialism that for Benjamin involved interrupting myths of historical progress by bringing past and present together within the dialectical instant of *Jetztzeit*, or "now-time." Given that the mimetic faculty represents the means, for

Benjamin, of breaking down the chronological distance and cognitive distinction between cultural and natural history, present and past, his images of primordial mimesis were designed to have a counterhegemonic, defamiliarizing effect. However, what remains to be considered is how far mimesis—and the dialectical images it catalyzes—can be claimed to serve the counterdominant work of historical materialism versus the degree to which the dialectical production of startling now-time may instead be indistinguishable from the fetishistic functions of the market. Capitalist mimesis (and the mimicry of animal capital, more particularly) appropriates the method, if not the political motives, of the historical materialist insofar as market discourses also dialectically associate capitalist mimesis with the "primitive" domain of biological mimicry.

Significantly, it is around an image of mimesis as an animal leap into the past that the question of now-time's subsumption was raised by Benjamin himself, who was cognizant of the potential difficulty of distinguishing between the dialectical flash that disrupts myths of progress and the fetishistic frisson of perpetual newness "immanent to the productivity of capital." It was in relation to the fashion industry, which perhaps most typifies capital's cooptation of the shock of newness, that Benjamin wrote, "Fashion has a nose for the topical, no matter where it stirs in the thickets of long ago; it is a tiger's leap into the past." Aware, perhaps, that his own evocation of mimesis as a primordial compulsion was deeply susceptible to fetishism, Benjamin attempted to draw a distinction within the mimetic spring of the tiger. "This jump," he said in relation to the fashion industry, "takes place in an arena where the ruling class gives the commands. The same leap in the open air of history is the dialectical one."

Benjamin's writings on mimesis are closely associated with those of Adorno and Horkheimer, who were similarly fascinated with the "archaic character of mimesis," in the words of Gunter Gebauer and Christoph Wulf.²² Adorno formulated mimesis as a "nonconceptual affinity" between self and other, an immediate, surrendering relation of culture and nature.²³ While profoundly aware of capitalism's ability to instrumentalize mimesis to a degree that cast serious doubt on its disruptive potential, Adorno, like Benjamin, nevertheless held out hope for

its ultimate noninstrumentality for power, that is, hope for the alterity of mimesis. If not exactly the rudimentary compulsion that Benjamin explored, what typified the alterity of mimesis for Adorno was a "living experience" still glimpsed in its original, not yet disenchanted state in so-called primitive cultures, for which nature ostensibly continued to represent an otherness evading objectification and conceptual mastery.²⁴ Adorno believed that only aesthetic experience could restore the vitality of such a mimetic immediacy of culture and nature.

As Taussig notes, Adorno and Horkheimer were acutely aware that "civilization does more than repress mimesis" and that mimesis can be mobilized in the service of total itarianism, anti-Semitism, and racism. 25 Both Benjamin and Adorno and Horkheimer affiliated mimesis with the primal sense of smell—the "most animal" of the senses (66). "Of all the senses," wrote Adorno and Horkheimer, "that of smell... bears clearest witness to the urge to lose oneself in and become the 'other.'"26 In Benjaminian terms, smell can affectively trigger memories that have been buried or repressed, causing the past to flash up in the present. Yet if redemptive possibilities accrue to smell as a sensory means of identification and a mimetic porthole into the collective unconscious (or animal past) of humanity, smell can also be organized to serve the political ends of anti-Semitism and racism via the arousal of "primitive" passions of hate and fear. Just as fashion has a nose for the topical, exploiting the affective value of a dialectic between past and present, so fascism and racism have historically exploited associative articulations of Jews and other racialized groups with animality, or "biological prehistory," as Horkheimer and Adorno put it (67).²⁷ The effect is that racialized subjects are viscerally experienced as biological "danger signs which make the hair stand on end and the heart stop beating" (180).

While understanding mimesis as "a repressed presence not so much erased by Enlightenment science and practice as distorted and used as hidden force," the work of the Frankfurt School nevertheless betrayed its own entanglements in a primitivist fantasy of the "other" of technological modernity. It was tinged, in other words, with the paternalistic aesthetics of a Europe sick unto death of its own technological sophistication and seeking a revitalization of experience through the contemplation and collection of the alterity of non-European cultures ostensibly

living in a closer mimetic relationship with nature. Intellectuals such as Adorno and Horkheimer, seeking a way out of the claustrophobic advance of European fascism, on the one side, and the reifying powers of commodity culture on the other, looked to mimesis as a repository of prediscursive or "primordial reason."²⁹ Yet the persistent association of this primordial reason with other cultures exoticized in their closeness with nature betrays the historical immanence of their own formulations of mimesis and alterity to Eurocentric culture.

Roger Caillois's "Mimicry and Legendary Psychasthenia" (1938) was part of the efflorescence of mimetic theories spawned under the double specters of fascism and capitalism during this period. 30 One of the founders of the Collège de Sociologie (a Parisian avant-garde group including Georges Bataille and Michel Leiris), Caillois turned to the study of insects to carve out a pathological theory of biological mimicry (17). Insects mimicking the appearance of leaves, twigs, or stones revealed, for Caillois, a vertiginous "luxury" or mimetic excess by which animate and animal life appeared irrationally driven to approximate inanimate life, stasis, and even death. He christened this animal death wish "le mimetisme" (17). Caillois's elaboration of biological mimetism, like the "mimetic impulse" theorized by Adorno and the "compulsion to become similar" sketched by Benjamin, argues for "a deeply internalized tendency in all living things to deliver themselves up to their surroundings."31 The playing dead of insects and animals signals not a survival mechanism protecting an organism against predation, Caillois contended, but a perverse death drive that he formulated as a "temptation by space."32 Le mimetisme lures creatures into losing their distinct outlines and will to life by provoking them to seek an "assimilation to the surroundings" (27). "What mimicry achieves morphologically in certain animal species," elaborated Caillois, schizophrenia unleashes in human subjects—a loss of subjectivity and a "depersonalization by assimilation to space" (30).

Caillois's formulation of the relationship between mimesis and schizophrenia has been rearticulated, with a difference, in the poststructuralist philosophy of Deleuze and Guattari, who elaborate becominganimal as an affective compulsion and involuntary "desubjectification." For Deleuze and Guattari, "becomings" radically challenge the reduction

of mimesis to relations of imitation, because *imitation* continues to connote a dialectic of nature and culture, original and copy, in which the two terms retain their binary distinction.³⁴ However, in first theorizing mimesis in terms of a pathological becoming exceeding imitation, Caillois in effect removed mimesis from a field of social power and returned it to the secret biological life of an organism subject to involuntary, inexorable drives.

Moreover, as Denis Hollier notes, "Caillois does not find it worthwhile to remind us that [an animal] can only play dead because it is alive. His entire analysis proceeds as if playing dead and being dead were one and the same."35 If such an indifference to the "vital difference" is possible in the work of Caillois, how much more will market discourses elide the material difference, or exploit the aporia, between death as a mimetic feint and death as a fatal effect of capitalism's logics? The mimicry of the market fetishistically imbues commodities with a semblance of vital life while materially reducing life to the dead labor and nature of capital; market logics indeed render "the vital difference" indifferent by converting life into a mimetic effect transcending material distinctions between the living and the dead. Caillois's formulation of mimetism as a death instinct compelling animate life to revert to an inanimate state—his suggestion that a "return to an earlier state, seems here to be the goal of all life"36—itself can be read as a discursive displacement of the violence of capital's commodifying logics onto a theory of a pathological and regressive nature. Caillois's discourse of animal mimetism, that is, formulates as a biological compulsion what is in effect the market's reifying drive to convert all nature into capital.

Taussig ultimately recognizes the danger of "resting mimesis on a psychological or biological base-line such as a 'faculty' and buttressing it with notions of 'the primitive.'"³⁷ He asks, "can we not create a field of study of the mimetic which sees it as curiously baseless, so dependent on alterity that it lies neither with the primitive nor with the civilized, but in the windswept and all too close, all too distant, mysterious-sounding space of First Contact?" (72). Yet wary of idealizing the alterity of a mimetic faculty or power that perennially represents a surplus of "otherness" eluding capture, I propose that as capitalism has expanded

in the twentieth and early twenty-first centuries to become an intensive and universal logic constitutive of life itself (that is, as capital has become animal), it is important to confront the harrowing possibility that mimesis may be wholly immanent to its biopolitical workings. It is this historical subsumption of mimesis into the cultural-economic machinery of capitalist biopower that "rendering" provisionally signposts. Negri's engagement with the Marxist problematic of real subsumption through the notion of "tautological time" will help me to elaborate the importance of resisting the appeal of mimesis as alterity in order to reckon with the material history of mimesis as rendering. En route to situating rendering in the time of real subsumption, however, let me first supplement this first genealogy with its industrial double.

Second Genealogy: Animal Recycling

Animal rendering shares, with prostitution, the euphemism of being the "oldest profession in the world." In an Errol Morris documentary film, Gates of Heaven (1978), a rendering executive describes the industry in the proverbial tense of the euphemism: "Rendering is one of the oldest industries . . . it dates back to the time of the Egyptians. It could be the oldest industry in the world, it could be, it's possible."38 These words in Morris's filmic text defer rendering to the distant past and to the very delta of civilization, a gesture consonant with the official rhetoric of the industry. For instance, the first sentence of the rendering history offered in The Original Recyclers, a book published in 1996 by the National Renderers Association (NRA), similarly euphemizes a capitalist economy of rendering by tracing its origins back to the immemorial beginnings of Time itself.39 According to the NRA, the story of rendering stretches back to even before the ancient Egyptians, back to the mythical moment when Homo sapiens, through the act of cooking animals over a fire, broke out of an enmired state of nature and inaugurated History: "Although rendering as an organized and cohesive industry has been around for only 150 years, the process of melting down animal fats to produce tallow and other fats and oils probably got its start when Homo sapiens began cooking meat over a campfire and saving the drippings" (2). Around this primal scene of rendering—in

the loaded moment when the raw becomes the cooked as an inaugural mark of civilization - Homo sapiens, meat, fire, and cooking as the rudimentary technique of rendering are etched as timeless anthropological signs. Rendering as a modern and "cohesive" capitalist industry flickers in the mythic firelight of an originary human practice. The surplus captured by the modern industry is refracted through the half-light of the animal "drippings" gleaned by early humans around the campfire, reflecting surplus value as nothing more than a natural remainder separated out through the primary technology of cooking. The scene suggests that Homo sapiens entered into the historical record the instant he discovered himself, through the act of rendering, to be Homo oeconomicus. Moreover, industrial rendering is cast as simply the evolved and "cohesive" expression of an economizing impulse that first prompted a glimmer of historical sense in prehistoric Man (the revolutionary idea of saving drippings for the future) and launched humans on the path of progress. Via this depiction of rendering, animal capital melts back into a timeless tableau of use value, appearing to be anthropologically continuous with an age-old practice of using every part of an animal.

RENDERING'S MODERN LOGICS

As dangerous, then, as euphemisms that depict political cultures of prostitution under capital as merely the modern expression of a timeless and inevitable practice are euphemisms that install rendering as a sign of natural industriousness at work in the world since time out of mind.40 For all of the signs that have come to appear universal in the euphemistic discourse of rendering—animal sacrifice, conservation, waste, and surplus value ("cooking meat over a campfire and saving the drippings")—are in fact historically, culturally, and politically contingent. Just as Gayle Rubin historicizes the "traffic in women" in relation to "a systematic social apparatus which takes up females as raw material" and fashions them into objects of exchange, rendering notates semiotic and material traffics in animal life specific to the social relations of capitalism.41 The second genealogy presented here thus resists the universality claimed by the rendering industry, emphasizing instead rendering's specificity as a marginalized, malodorous, yet massively productive industrial culture of capital. While the bulk of this book engages with rendering as a biopolitical logic including, but invariably exceeding, its economic referent, the following genealogy brings it into

view as an industry deploying particular material and rhetorical technologies at specific historical junctures to reproduce capitalism.

Genealogizing rendering as a capitalist industry itself immediately entails "splitting," however, because the animal recycling denoted by rendering has, over the past few decades, been usurped by the nowpopular use of rendering to denote postindustrial cultures of digital animation. I have already suggested that in its modern usage rendering has long accommodated a balance of power between its at least double connotations; it has popularly referenced representational practices as well as the recycling of animal remains. At the turn of the twenty-first century, the balance seems to have tipped to the extent that rendering no longer popularly evokes the industry that breaks down animal hides, bones, blood, and offal but instead evokes the new culture industry that traffics in 3-D images of life assembled out of algorithmic bits of code. Digital capitalism appears to have successfully spirited away the bad affect associated with the boiling down of animal remains, reinventing rendering as an aesthetic notation for the field of computergenerated images. The reinvention of rendering by digital capitalism arguably depoliticizes both industries, associating ongoing traffics in animal material with technological virtuality, on the one hand, while identifying computer-generated graphics with biological stock, on the other. Render farm, the name given to facilities that cluster together processors in order to amass the "horsepower" needed for computergenerated imagery, provocatively articulates virtual with biological animal capital to coin a new mode of technological production. For instance, viewers of Bee Movie (2007) learn in one of the film's behindthe-scenes special features, that the movie required 23 million "render hours," in the new language of computer labor power. Caught in the midst of the reinvention of rendering by digital technologies, it is important to consider that computer-imaging technology supplements rather than displaces its industrial precursor, enabling advanced capitalism to pursue contradictory semiotic and biological traffics in animal life. For the present purposes, I confine myself to a genealogy of industrial rather than postindustrial rendering while nevertheless flagging the fact that what seem like two wildly disparate and noncontemporaneous practices—the one pursuing the carnal recycling of animal matter, the other a representational recycling of lifelike effects whose prototypes are invariably animal—can be placed in political relation, via a theory of rendering, as concurrent and complicit logics of capital.

A genealogy of modern rendering might begin by revisiting its relation to the industrialization of slaughter in Europe and North America in the nineteenth century. In her study of French abattoirs, Animal to Edible, Noëlie Vialles remarks that the word abattoir appeared in France around 1806, "at the same time as Napoleon's major reorganization of slaughtering and butchering."42 Napoleon's project of modernization involved, crucially, the "exile" of the sensoriums of slaughtering and rendering to outlying precincts far from the eyes and noses of an urban polity (22). In the nineteenth century public culture began to be sanitized and sensitized through myriad practices, disciplines, and reforms best discerned, perhaps, by Foucault. According to Vialles, the institutionalization of enclosed, monitored facilities devoted solely to animal slaughter in compliance with new regulations and sensibilities around "suffering, violence, waste and disease, 'miasmas,' and finally animals themselves," helped to materially and ideologically prepare conditions for the massification of slaughter (19). "The quantities dealt with were henceforth on an industrial scale and called for suitable organization," writes Vialles. "It was a development that led... to the remarkable 'vertical' abattoirs of Chicago," where the mechanized moving-line production prototypical of Fordist capitalism would find one of its first applications (22).

The exile of slaughter to a "clandestine" space of public secrecy was reinforced, notes Vialles, with attempts to euphemize the industrialization of animal sacrifice (22). The term *abattoir* was coined to name "the 'no-place' where this massive and methodically repudiated slaughter" took place (23):

The general meaning of *abattre* is "to cause to fall" or "to bring down that which is standing." It is primarily a term in forestry, where it refers to felling; subsequently, it came to be used in the mineral world, where it denoted the action of detaching material from the walls of a mine tunnel. It also belongs to the vocabulary of veterinary surgery, and particularly when applied to a horse it means to lay the animal down in order... to give it medical attention. (23)

As euphemisms, abattoir and abattre sought to equate the "felling" of animals with the felling of trees or minerals (and even with the veterinary treatment of a sick animal), so that "the slaughterer becomes a woodcutter, and blood is almost edulcorated into sap" (23). Yet, as Vialles adds, attempts to euphemistically deflect the violence of industrialized slaughter often failed, as abattoir itself came to assume the taint of all that it had been designed to disavow.

Symbiotic with animal slaughter, rendering was also being reformed into an industrial, mass, yet inoffensive culture of capital over the course of the nineteenth century in Europe and North America. From the nineteenth century to the present, the rendering industry has innovated many material technologies for scrubbing itself clean of the acrid, malodorous signs of its carnal commerce. 43 Retreating out of an urban field of vision was just one step in the reorganization of slaughter and rendering; doing everything possible to prevent the sensory revolt triggered by smell has arguably been even more critical to the affective management of animal capital. As slaughter and rendering were turned into mass operations in the nineteenth and twentieth centuries, suppressing the "olfactory obtrusiveness" haunting rendering's traffic in "perishable substances" became something of an industry obsession and the sensory index of its progress.44 Modern renderers became acutely conscious of olfactory leakage from the industrial cooking of animal remains and of a populace whose senses risked being offended by reminders of a grisly business exiled to the margins of public consciousness. The containment of smell has been integral to the inconspicuous "no-place" of public secrecy within which modern rendering has achieved invisibility. 45 Recalling the importance placed on smell by both Benjamin and Adorno and Horkheimer as a sensory trigger of mimetic identification, the control of smell is suggestive, moreover, of the containment and management of affect aroused by a potential identification with animal others subject to sacrifice. Smell's management enabled public culture in "knowing what not to know"46 about the "anonymous flesh" on their dinner table. 47 The rendering industry has striven to spirit away all sensible traces of the historical—that is, dying-animal, preventing the smell of animal remains from reaching the nostrils of consumer culture by promptly converting perishable nature into perennial capital.

Alongside strategies of sensory and affective containment, the rendering industry also employs euphemism, as I began this section by noting, to divert recognition of its specific productivity under and for capitalism. When capital's clandestine traffic in animal bodies emerges, from time to time, out of the odorless and invisible "no-place" it has sought to inhabit in modernity, it takes rhetorical flight into the past by reciting, as the rendering executive in Gates of Heaven does, its fathomless ancestry. In his "case study of animal by-products recovery from the Neolithic period to the middle of the twentieth century" in an article in a 2000 issue of the Journal of Industrial Ecology, Pierre Desrochers adds academic argument to the popular euphemism of rendering as the "oldest industry in the world." ⁴⁸ Desrochers offers sweeping, transhistorical evidence of rendering as an age-old practice, erasing its specific character under the political economy and cultural logics of industrial capitalism. "The oldest glue discovered so far," writes Desrochers, "was made by Neolithic cave dwellers living southwest of the Dead Sea some 8,000 years ago. It was made from collagen (the fibrous protein taken from animal skin, cartilage, and bone) and was used to waterproof rope baskets and containers" (32). Desrochers proceeds to classify glue derived from animal remains in Europe and America around the turn of the twentieth century as a product of the same "human creativity" that rendered the 8,000-year-old Neolithic specimen (35). In brief, Desrochers argues that while contemporary Western industrial culture claims to have improved on wasteful economic practices of the past by assuming itself the first to achieve "closed loop" production, an industrial ecology of waste recovery has been in practice at least from the mid-eighteenth century on.

For Desrochers, in fact, rendering dissolves into an ageless syntax for an economical and ecological reuse of waste in evidence from time out of mind, as he collapses waste recovery practices of "the Neolithic city of Çatal Hüyük" with those of "the Roman era" and further proceeds to suggest that "the same process was also going on in North America, where Plains Indians turned bones into, among other things, fleshing tools, pipes, knives, arrowheads, shovels, splints" (32). In a work that is

a history rather than a genealogy, Desrochers reduces profoundly disparate cultures and eras to the common sense of rendering (and displaces recognition of a specifically modern, capitalist logic of recycling with evidence of rendering's universality). Not surprisingly, when his history "progresses" to industrial cultures of the nineteenth and twentieth centuries, Desrochers places them in sweeping continuum with the industriousness of Neolithic, Roman, and Plains Indian cultures. "Market incentives," according to Desrochers, are a natural extension of the proverbial economism according to which *Homo sapiens* is universally moved to "create wealth out of residuals" (38).

Within such an epic narrative of rendering, a capitalist industry is equated with indigenous practices of rendering, enabling dissimulation of its specific economic, political, and cultural motives. An animal sign mediates just such an identification with indigeneity in the collection of articles published by the NRA in *The Original Recyclers*. ⁴⁹ A photo profile of a buffalo appears on the frontispiece of the book, accompanied by these words: "The buffalo exemplifies the rendering industry because the American Plains Indian appreciated the value of utilizing the whole animal." The collection of essays in the volume—tracking technological advancements and the creation of new markets capable of absorbing the ever finer surpluses being skimmed off of animal remains—are insidiously framed under a totemic (and dangerously static) figure of indigeneity and use value. ⁵⁰

A Historical Perspective"—Frank Burnham further indigenizes the modern industry by placing it in lineage with native Northwest Coast cultures. In this case, the totemic figure is a "rendering-like process" practiced by the Tsimshian on the Nass River in British Columbia. Burnham relays a lengthy citation from the early ethnographic account of Robert F. Heizer, who tells how the Tsimshian rendered oil or "grease" from small fish called eulachon to use both as a foodstuff and in trade with the neighboring Tlingit. Heizer's account is saturated with paternalism for savages capable of favoring "one of the gamiest foods ever concocted" and for the "rank riches" of the eulachon trade, poking fun at its smelly "aura." Given that the eradication of smell has been, as I have suggested, one of the rendering industry's most

[67]

sensitive indexes of progress, Heizer's ethnocentric account describes "other" practices of rendering as crude predecessors to those used by the modern industry, relegating them to a primitive past and even to a pungent prehumanity.

The "potlatch grease" rendered by the Tsimshian—given away in ceremonies that were considered lavishly wasteful by colonial governments in Canada and first prohibited in an 1885 statute⁵²—mediates social relations of exchange very different from those mediated by capital. West Coast potlatch ceremonies have long been overdetermined not only by the racist precepts of colonialism but by a Eurocentric ambivalence toward "waste," an ambivalence fixating on the potlatch as both a threatening and fascinating figure of excessive expenditure.⁵³ The history of the "fat-splitting" industry in The Original Recyclers calibrates a canny balance of identity and difference in relation to the ethnographic figure of "potlatch grease" Burnham recites, at once inviting a blurring of incommensurable cultural logics of rendering (and, by naively identifying "fat" as the natural surplus of both, effectively misrecognizing the difference of capitalist surplus value) and carefully distinguishing the industry's superiority over its crude precursors. The "rendering of wealth" in native West Coast cultures is both mimetically identified with and differentiated from the wealth rendered by a Euro-American "fat-splitting industry"—enabling the fantasy of rendering's timeless universality and the ethnocentric refusal of historical coevality with indigenous economies.54

If an evocation of its indigenous roots is one means through which the rendering industry naturalizes its logic, emptying "waste" of its historically contingent properties is another. Yet waste as a specifically modern preoccupation is both materially created through industrial economies of motion geared toward the massification of capital and discursively created through colonial hierarchies distinguishing the rationality of industrial capitalism from the irrationality of indigenous economies associated with the potlatch. It is in this Foucauldian sense that waste is *produced* as a modern subject.

"As the kill rate rose in the nation's slaughter houses from tens to hundreds, even thousands, of animals per week," writes Burnham in relation to the U.S. rendering industry around the turn of the twentieth century, "without the renderer the problem of disposing of these inedible byproducts of the beef industry would have become one of horrendous proportions." The rendering industry—evoking its etymology in the old French rendre, "to give back," as the NRA does in the epigraph used to open this chapter—will formulate itself as the redeemer of the animal carnage of mass capitalism. "And indeed rendering does give back," declares the NRA, riding on a rhetoric of reciprocity that disguises the fact that rendering returns animal waste to another capitalizing round in the marketplace rather than releasing it into circuits of value outside of those circumscribed by the profit motive. 56

Yet rendering convincingly poses as an ecological service that atones for carnivorous capital. It is through the idea that recycling offers an antidote to the unbridled greed of industrial culture (through the idea that recycling curtails capital's compulsion to unlimited consumption and production) that the even more total capitalization of nature promised by rendering evades notice. Rather than being simply posterior to mass production (recovering what is left over after economic exploitation), the rendering of animal by-products is arguably entwined in the material and discursive conditions of possibility of modern capitalism. It is important to counterintuitively consider the rendering of waste as a condition as well as an effect of the pace and scale of industrial capitalism. More than just mopping up after capital has made a killing, the rendering industry promises the possibility of an infinite resubjection ("return") of nature to capital. The "industrial ecology" metaphor of the closed loop valorizes the ecological soundness of waste recovery and recycling just as the rendering industry effectively opens up a renewable resource frontier for capitalism.

The rendering industry promises to redeem waste as an "unrealized abundance," a seemingly innocent project that in fact stores the political promise of capital's potentially endless renewability by securing the material grounds of capitalism beyond the limits of nonrenewable "raw" materials.⁵⁷ As Desrochers notes, it is predominantly around the rise of industrial rendering that the idea of the material "loop" or "retycle" is put into historical circulation, a new figure of material, cultural, and political sustainability that curls a teleological trajectory of historical progress into the even more totalizing round figure of capital as a

closed loop. Thus, while inconspicuously appearing to be an afterthought of capitalist production, the rendering industry radicalizes the nature of capitalist production and consumption. The secondariness encoded into waste recovery diverts recognition of the rendering industry's pivotal role in opening up recycled material as a new resource frontier for capitalism. In his book By-Products in the Packing Industry (1927), the early American economist R. A. Clemen noticed that the "manufacture of by-products has turned waste into such a source of revenue that in many cases the by-products have proved more profitable per pound than the main product."58 In Nature's Metropolis: Chicago and the Great West (1993), William Cronon likewise notes that according to the books of Philip Armour, one of the most powerful American meatpackers around the turn of the twentieth century, it was only as by-products that animals returned as capital: "Armour estimated that a 1,260-pound steer purchased in Chicago for \$40.95 would produce 710 pounds of dressed beef. When sold in New York at an average price of 5 and 3/8 cents per pound, this beef would earn only \$38.17—a clear loss without deducting production and transport costs. Only by selling by-products could the packers turn this losing transaction into a profitable one."59 Rather than salvaging an ecological ethic of use value for cultures of capital, as it portrays itself as doing, the rendering industry scouts out an internal frontier ensuring capitalism will be able to continue its restless drive for economic expansion, training a new gaze inward on itself to cannibalize its own second nature. Here "second nature" literally describes the cooked wastes that are captured and returned, through the sphincters of the rendering industry, to the mass metabolisms of industrial capitalism from whence they came.

RENDERING'S MODERN LOGICS

The emergence of a rendering industry thus signals a shift in both the material and the symbolic conditions of capital, from a predominantly raw diet of so-called first nature to one increasingly contingent on recycled nature. With the industrial consolidation of rendering, capital begins ingressing on itself, prompted by a budding appreciation of the returns to be made from the capture and reconstitution of its own cooked residues. Contests over labor and nature at the imperial and colonial frontiers of market cultures in the nineteenth and twentieth centuries—the very narrative of the frontier as capitalism's expansion

outward to exploit the receding rawness of "first natures"—has arguably been supplemented by the probing of capital into the entrails of its own industrial cultures, with a new prospecting and staking out of waste not as spare change but as undiscovered inner space. The outward-looking gaze of capital toward the conquest of so-called raw colonial resources and markets is accompanied, around the turn of the twentieth century, with a studied appreciation for cooked natures already at least once chewed over and spit out by industrial capital, those second-, third-, and fourth-order materials deemed "waste."

It is possible, arguably, to track a distinction between formal and real subsumption not only in the material history of labor, as Marx does, but also in the material history of nature. The "formal subsumption of labor under capital" points, for Marx, to a stage in which forms of labor deriving from outside of capitalist social relations are incorporated into its processes. 60 As he writes, "Capital subsumes the labor process as it finds it, that is to say it takes over an existing labor process, developed by different and more archaic modes of production" (1021). By contrast, the real subsumption of labor signifies "the development of a specifically capitalist mode of production . . . [that] revolutionizes their actual mode of labor and the real nature of the labor process as a whole" (1021). The achieved passage to real subsumption is historically aligned by many, including Negri, with postmodernity and with forms of immaterial rather than material labor (that is, with the socialized labor of reproducing the social conditions of production). However, theoretical debates surround Marx's claim that the formal subsumption of "archaic" modes of production is a historical precondition of real subsumption, debates raised by postcolonial and feminist critiques of the Eurocentric teleology posed by Marx's contention that an advanced stage of (European) capitalism is the necessary precursor of communism.⁶¹ Gayatri Chakravorty Spivak, for instance, argues that the material politics of the "socialization of the reproductive body" of the subaltern woman has been foreclosed by "the tradition of Marxism and continues to be excluded."62 The genealogy of rendering I have been tracing suggests that it is not only the reproductive bodies and labors of (subaltern) women that have been excluded from a Marxian problematics of subsumption but the reproductive resources of animal nature as well. A genealogy of rendering shifts the critical discourse on real subsumption away from its historical focus on human (European) labor and social subjectivity and opens a repressed history of nature's subsumption. I will pursue this proposition in the final section of this chapter.

A critique of rendering's rhetoric of "return"—and my contention that the material renewability promised by the industrial ecology of "closed loops" serves an ideological vision of capital as biopolitical totality—suggests the need to be wary of a logic of recycling first formulated for cultures of capital over the remains of animals. Among the many cultural mythologies thrown into question by a study of rendering is one that valorizes recycling as a redemptive, subversive retort to capitalism (a mythology with currency in many contemporary green social movements). Resource and animal conservation discourses need to be examined for how they may inadvertently advance rather than antagonize the hegemony of capital. For a logic of recycling first developed around animal rendering arguably supplements the wasteful hyperproduction and consumption of commodities with an ecological ethic of material efficiency and waste recovery that surreptitiously supports the sustainability of capitalism.

To more specifically locate the claims I have made regarding the internal resource frontier that renderers discover for capitalism in the entrails of its own industrial metabolisms, let me track back to a series of discourses that produced waste as a new subject of attention around the middle of the nineteenth century. The "pioneer industrial ecologist" Peter Lund Simmonds (1814-97) was one key agent of the emerging interest in waste as capital in potentia. A journalist who worked for the British Department of Science and Art, Simmonds created a large illustrative collection on the reuse of waste products for London's Bethnal Green Museum and supervised numerous other exhibits on the productive recapitalization of industrial by-products. In an introduction prepared for a guidebook to the animal products collection of the Bethnal Green Museum (1872), Simmonds declared: "It is one of the most important duties of the manufacturing industry to find useful applications for waste materials. Dirt has been happily defined as only 'matter in a wrong place."63 Around the same time that Ernst Haeckel coined the

neologism "ecology" to describe "the nascent science of nature's households," Simmonds was formulating the sympathetic science of rendering as a sorting, distributing, and returning of waste materials to their proper place, that is, the place where they regenerate as capital.⁶⁴ In the discourse of industrial ecology pioneered by Simmonds, a capitalist economy began to approach the totality of a natural ecosystem through the material mimicry of Nature promised by industrial rendering. Anticipating contemporary discourses of biomimicry, Simmonds energetically promoted the idea that "modern industrial economies should mimic the cycling of materials in ecosystems."65 Simmonds wrote: "When we perceive in nature how nothing is wasted, that every substance is re-converted, and again made to do duty in a changed and beautified form, we have at least an example to stimulate us in economically applying the waste materials we make, or that lie around us in abundance.... There is no waste in Nature."66 In suggesting that substances "again made to do duty" in an ecosystem are equivalent to substances returned to the industrial loop to render another generation of capital, Simmonds helped a political economy to mimetically pass as a natural conomy by subtracting profit motives from the equation. However, in Inimal Products: Their Preparation, Commercial Uses, and Value (1875), Simmonds unmasked the motives behind the budding appreciation of maste: "As competition becomes sharper, manufacturers have to look more closely to those items which may make the slight difference beween profit and loss, and convert useless products into those posessed of commercial value."67

In the context of turn-of-the-century North America, as Cecelia Tichi discerns in Shifting Gears: Technology, Literature, Culture in Mod-inist America (1987), the "rubric 'waste'" emerges in different ways to rganize a multitude of powerful interests (66). From Thorstein Veblen's adictment of wasteful consumption in The Theory of the Leisure Class 1899) to conservationist calls to save wilderness and natural resources figures such as Gifford Pinchot and Theodore Roosevelt to Ford's accision of any inefficient expenditure of labor or materials from auto 1882 sembly lines, "the term 'waste' is crucial" (57). As Tichi writes, Ford's 'Learning from Waste' argued to the fraction of the inch and

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the hundredth of a cent that Ford plants maximized natural resources and manpower in order to serve the American public" (65). Most important, notes Tichi, the "rubric 'waste'" made sense only within the context of a discursive episteme that viewed the world in component parts or pieces (66):

Waste... presupposes a certain form of intellectual analysis of a condition or situation. The analysis must include a breaking-down, a dis-assembly of the way something works. To pronounce a situation or condition wasteful is to have first scrutinized the whole of it by breaking it down into its component parts. To call it wasteful is to have seen or devised a better, more efficient way of doing things. That can only be accomplished by an intellectual dis-assembly and re-assembly. (64)

Tichi traces the scrutinizing disassembly out of which "waste" would emerge as a peculiarly capitalist obsession to the time-motion studies of Eadweard Muybridge, Étienne-Jules Marey, and Thomas Eakins. A burgeoning interest in waste "owed much to the contemporary interest in the visualization of motion in space" promoted by the time-motion studies of all three, studies that helped model a trim, lithe "economy of motion" for industrial capitalism (77).

If Simmonds likened the industrial "loop" of rendering to Mother Nature's biotic recycles, Marey and Muybridge more specifically targeted the efficiency of the animal body as an organic prototype for the fluid "economy of motion" that industrial assembly line production hoped to model. Marey used a "chronophotographic" gun to capture visuals of birds in flight, sequential stills that could be assembled to recreate a semblance of continuous motion—a key organic effect chased by modern technologies of capital. Using a device he called a zoopraxiscope, Muybridge likewise reassembled his photographic stills of animal movement (most iconically, that of a galloping horse) into what amounted to a technological preview of the motion picture, turning the visual breakdown of animal physiology back into a model of apparently seamless mobility. The physiological studies of Muybridge and Marey are often cited as "protoanimations" paving the way for cinema.⁶⁸

Time-motion studies seized not only on the body of the animal but also on the body of the laborer, another of industrial capitalism's primary objects of "intellectual scrutiny." It was through the scientific management principles promoted by Frederick Winslow Taylor that time-motion ideologies originating in the study of animal bodies developed ergonomic implications for an industrial culture of moving essembly lines requiring workers to perform repetitive motions with increased mechanical efficiency and speed. Emerging in the 1910s as a patron saint of efficiency," Taylor used a stopwatch to conduct a different species of time-motion study.⁶⁹ He "separated seemingly simple [laborer's] tasks into their smallest components, analyzed each for excess or extraneous motion, then worked to reformulate them so precisely and economically that they required no excess mechanical motion of the worker's body or his tools."70 Choosing as his subjects not birds in Right but miners shoveling coal, Taylor "shot" their manual motions and zoomed in to produce a series of temporal stills that made the efficient motions buried in each micromotion perceptible. From here it was a matter of splicing out wasteful or extraneous movements and reschematizing a molecularly streamlined laboring force. "Essentially saylor saw in industry the opportunities that sequential stop-motion hotographs were providing the visual experimenters Thomas Eakins, tienne Marey, and Eadweard Muybridge in the 1880s and 1890s," rites Tichi.71 "His objective was to find the one best way to accomplish ech work task, then to standardize that way" (78). Through an unprece-Lented subjection of bodies to microscopic performance measures, me-motion technologies and knowledges produced wasteful movement a matter of reform and as a negative surplus that could be shaved off and converted into savings for the capitalist.

Taylor's principles of scientific management stimulated a biopolitical corganization of far more than the movements of the "workingman." They informed the conservation science of Gifford Pinchot, who began manage against the waste of natural resources to ensure the material luture of generations of American capital to come. In his 1908 "The slaughter of the Trees," Emerson Hough juxtaposed photographs of iorests laid waste with images of the orderly results of the new methods of scientific forestry advocated by Pinchot as head of the U.S. Forest Service. As for the slaughter of the animals, Upton Sinclair's The Jungle (1905) records not only the infamous "speeding-up" of the moving lines that Taylorism inspired but also the pursuit of "porkmaking by

applied mathematics," summed up in the popular quip "They use everything about the hog except the squeal."⁷² In his description of "Durham's," a fictional rendering plant, Sinclair writes:

No tiniest particle of organic matter was wasted in Durham's. Out of the horns of the cattle they made combs, buttons, hairpins, and imitation ivory; out of the shinbones and other big bones they cut knife and toothbrush handles, and mouth-pieces for pipes; out of the hoofs they cut hairpins and buttons, before they made the rest into glue. From such things as feet, knuckles, hide clippings, and sinews came such strange and unlikely products as gelatin, isinglass, and phosphorous, bone black, shoe blacking, and bone oil. . . . When there was nothing else to be done with a thing, they first put it into a tank and got out of it all the tallow and grease, and then they made it into fertilizer. ⁷³

The rise of the rendering industry can be placed in the broader context, then, of a complex of scrutinizing, disassembling, and sorting practices biopolitically registering nature and labor as ever more minute units of potential value, units no longer able go unnoticed or to evade being "again made to do duty" for capital, as Simmonds put it. That waste is a product of the time-motion technologies and rationalizing imperatives of Euro-American capital rather than a preexisting, eternal use value is borne out even by the rendering history sketched in *The Original Recyclers*. For there Burnham notes that in the California cattle economy of the 1850s, when the market for animal products was almost entirely in hides and tallow, meat was considered a waste product and was "abandoned on the range" for coyotes and other wild animals.⁷⁴ This anecdote turns upside down not only the idea that meat constitutes an animal's universal use value but doxologies holding that waste is a self-evident given rather than a fickle sign factored out by market forces.

The rendering industry has for too long enjoyed an understated role in the history of capitalist modernity. Animal stock strained from the boilers of rendering plants is converted into glue, glycerin, gelatin, bone meal, soap—seemingly amorphous substances that are in fact deeply implicated in mediating both the material and the symbolic hegemony of cultures of capitalism. The rendering of hides and tallow from California cattle in the 1850s was historically entangled, for instance, in soap's colonial career as a mass commodity and material

signifier marketing a gospel of white supremacy to the so-called dark corners of the globe.⁷⁵ The discourse of speciesism that the modern rendering industry institutionalizes underpins the economic and cultural power of a white European humanity over "others of whatever sort."⁷⁶ A politics of rendering cannot be reduced, then, either to the material politics of producing and consuming animals as meat and material byproducts or to the cultural politics of fetishizing the origins of mimesis in biological mimicry.⁷⁷ It involves continuously coimplicating both in the historical conditions and effects of power.

"Mere Jelly"

In "The Point Is to (Ex)Change It: Reading Capital, Rhetorically" (1993), Thomas Keenan draws attention to an enigmatic expression made by Marx in his analysis of labor time as the hidden quantity or measure of exchange value. Marx described the abstract element common to all commodities, the element that constitutes the measure of their equivalence and hence exchangeability, as the "mere jelly [Gallert] of undifferentiated human labor." Marx's choice of words brings homogeneous labor time into view not only as an abstract measure of value but also as a visceral substance, opening up a materialist conception of labor time crucial to Antonio Negri's subsequent theorization of real subsumption and tautological time.

Yet if "mere jelly" is metaphorical, for Marx, of labor time as the homogeneous substance produced by and underpinning the system of exchange value, it is also uncannily evocative of the animal fats and gelatins being *literally* extruded during his lifetime, in unprecedented industrial quantities, from the rendering machines of capitalism. ⁷⁹ I want to use Marx's words as a lever into Negri's theorization of tautological time, a time that finds one of its historical examples, it seems to me, in the industrial closed loops of animal rendering. The example of rendering does not fit comfortably, however, in the history of real subsumption developed by Negri. For one thing, it locates a logic of real subsumption in the material metabolisms of industrial capitalism rather than in the postindustrial terrain of immaterial social labor where Negri locates it. Moreover, reading Marx's expression literally (rather than

only rhetorically) summons another material history into view besides that of human labor, which remains focal to Negri's materialist theory of time. Marx's enigmatic evocation of "mere jelly" suggests that human labor and (animal) nature are cosubstantial matters of real subsumption, or rather it emboldens me to extend Negri's theory of tautological time beyond the figure of human labor and life to which it is tethered. While "mere jelly" can be leveraged against the labor-centrism of Negri's work, it could by the same token be leveraged against Marx himself. After all, Marx was the first to inscribe a species distinction within the critique of capital by distinguishing human "species-being" from animal "species-life" and by claiming that the essence of the former, epitomized in forms of social labor, constitutes the historical subject of subsumption. 80

Before continuing, let me briefly situate Negri's formulation of tautological time in relation to his longstanding political commitments and prodigious efforts to theorize time as substance. Negri wrote "The Constitution of Time" (2003), in which the notion of tautological time appears, while in prison, voluntarily serving out the remainder of a sentence for terrorist activities in Italy against the state (activities of which he was later cleared). In the revival of interest in this and other works subsequent to the success of his collaborative work with Michael Hardt on Empire (2000) and Multitude (2004), the Italian Autonomia and Operaismo (workerist) communist movements with which Negri has been associated achieved wider influence. The notion of tautological time elaborated in "The Constitution of Time" is particularly germane to Negri's later analyses of biopower and reveals the importance of a materialist conception of time as substance to the theorization and practice of communism. However, from his early workerist involvements to his reinvention, with Hardt, of "the proletariat" as global multitude, human labor has remained at the center of Negri's work.81 Although Negri has affiliated his thinking with environmental social movements on multiple occasions, the history and politics of capitalist nature have by and large remained a subsidiary concern. I want to end this chapter by exploring how Negri's formulation of tautological time may have a specific bearing on the politics of rendering and animal capital while at the same time proposing that to extend his work in

this direction requires confronting the species distinction latent in his key concept of *ontological production*.

"The Constitution of Time" opens with an excerpt from Capital in hich Marx narrowed in on labor as the "value-forming substance" of commodity and determined that this value is measured in units of me. The remainder of Negri's text is devoted to troubling Marx's anderstanding of time as the formal measure of value by elaborating on simultaneous insights that time also emerges as the content or subence of production. Negri maps the end of time as measure and the mergence of time as substance onto the distinction between formal ad real subsumption first conceptualized by Marx. In an era of achieved subsumption (which for Negri is equivalent to the postmodern , time can no longer be treated as an extrinsic measure, an exterlity linked to the existence of use values surviving outside the rule of change value. That is, time no longer constitutes a transcendent quanout of which a certain number of daily hours are apportioned to cifically capitalist production or out of which the capitalist working y is carved. Time may have been transcendent under conditions of mal subsumption, in which use values and social relations of producoriginating outside of capitalism continued to provide a measure comparative difference or contrast to the logic of exchange value oduced in the social relations of capital. However, under conditions real subsumption, claims Negri, there is no longer "possibility of course to an external element" off of which to measure capitalist oduction.82 When capitalism overtakes everything once outside of to use a spatial metaphor for the temporal conquest Negri traces, me ceases to transcend the amount of time allocated to capital's production and becomes, instead, immanent to or identical with it. To approach the matter from an another angle, in an era of real sumption the time devoted to reproducing capital is no longer conned within the discrete outlines of a working day but expands to wer the whole time of life, such that there is no time that is not devoted producing for capital. Thus, as Negri writes, real subsumption consists an indifference between the labor time of the work day and the rest time, or in a seamless "flow between labor and time" (29). This can elp us to understand his claim that "to say that time measures labor is here but a pure and simple tautology" given that they have effectively become one and the same thing (25). In the tautological time of real subsumption, continues Negri, we are therefore confronted with "the impossibility of distinguishing the totality of life (of the social relations of production and reproduction) from the totality of time from which this life is woven. When the entire time of life has become the time of production, who measures whom?" (28–29).

Within the tautological time of real subsumption, however, Negri also sights radical potentials. He claims that "this final tautology seems to us to be extraordinarily productive from the theoretical and revolutionary standpoint. For now we know that time cannot be presented as measure, but must rather be presented as the global phenomenological fabric, as base, substance and flow of production in its entirety" (29). When time is brought down to earth and realized as the immanent substance of production, though it may be productive or constitutive of capital its very recognition as constitutive opens up the possibility of changing time. "In destroying time-as-measure," Negri writes, "capital constructs time as collective substance. This collective substance is a multiplicity of antagonistic subjects" (41). For Negri, the time of communism is in the making whenever time is collectively seized as the social substance of life. I will return to this point shortly in order to suggest that the tautological time of produced nature ("mere jelly") likewise needs to be considered in its potentials and that an alternative to market life hinges not only on recognition of the constitutive time of subsumed labor but also on the constitutive time of subsumed nature.

The history of time traced through the concepts of *labor's* formal and real subsumption—a history marked, as Negri couches it, by a passage from extensive forms of (material) labor to intensive forms of (immaterial) intellectual and linguistic production—can be differently traced through the example of *nature's* subsumption that rendering gives. However, the question of nature's subsumption remains largely undeveloped in Negri's work by virtue, I want to suggest, of his species-specific conflation of ontological production—the immanent, creative activity focal to his theory of constitutive time—with human labor and life. In other words, a hidden tautology is arguably at play inside Negri's very formulation of tautological time, such that to speak of

ontological production and to speak of human social labor becomes ffectively one and the same thing. "Every productive activity, every numan action," writes Negri, in a sentence that explicitly reveals their onflated status in his text, "is within this [time's] Umwelt [environment]" [15]. The genus of immanent life, as it were, is rendered equivalent to the species of human constitutive activity by virtue of privileging the labor ime (that is, the life time) of the latter in the concept of ontological roduction. A limit in Negri's thinking thus appears in the form of the losed loop within which production and human labor definitionally fer back to and reinforce one another.

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Reading Negri in dialogue with political ecology can be helpful in laborating his brief comment that "Nature is also a problem of subsumption." James O'Connor suggests, not unlike Negri, that in our only rhetorically) summons another material history into view besides that of human labor, which remains focal to Negri's materialist theory of time. Marx's enigmatic evocation of "mere jelly" suggests that human labor and (animal) nature are cosubstantial matters of real subsumption, or rather it emboldens me to extend Negri's theory of tautological time beyond the figure of human labor and life to which it is tethered. While "mere jelly" can be leveraged against the labor-centrism of Negri's work, it could by the same token be leveraged against Marx himself. After all, Marx was the first to inscribe a species distinction within the critique of capital by distinguishing human "species-being" from animal "species-life" and by claiming that the essence of the former, epitomized in forms of social labor, constitutes the historical subject of subsumption. ⁸⁰

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current era the reproduction of capital's conditions of production and the whole of "life itself" have become one and the same thing. Writes O'Connor: "Traditional socialism pertains to the production and reproduction of capital. Ecological socialism pertains to the production/reproduction of the conditions of production."85 Ecological socialism struggles to "redefine conditions of production as conditions of life" (308). In O'Connor's view, "capitalist threats to the reproduction of production conditions are not only threats to profits and accumulation, but also to the viability of the social and natural environment as means of life and life itself" (12). What differentiates Negri's and O'Connor's approaches, however, is that whereas Negri privileges the social labor of a human multitude in the politics of "life," O'Connor suggests that nonhuman producers, in the ecological sense of the word, are also subsumed into the ontological conditions of capitalist production. Feminists have long criticized Marx for having overlooked the unpaid domestic, sexual, and affective labors of women in the reproduction of the conditions of production, a critique that it is now clear also concerns other species—and they are legion—whose lives have become coextensive with the ecological conditions of capital.

Negri's brief comment regarding nature's subsumption can be further elaborated by means of an essay written by Martin O'Connor, who is not to be confused with James O'Connor (although the two are in fact closely affiliated through the journal cofounded by the latter, Capitalism, Nature, Socialism). There are striking similarities between Negri's theorization of an era of real subsumption and O'Connor's theorization, in "On the Misadventures of Capitalist Nature" (1994), of a "mutation in the system of capitalism" resulting in what he calls "capitalism ecologized."86 "In what we might call the ecological phase of capital," writes O'Connor, "the relevant image is no longer of man acting on nature to 'produce' value, henceforth appropriated by [a] capitalist class. Rather it is of nature (and human nature) codified as capital incarnate" (131). His words describe a historic shift from the externality to the immanence of nature in terms almost identical to those with which Negri describes the passage from the formal to the real subsumption of labor time. "What formerly was treated as an external and exploitable domain is now redefined as itself a stock of capital," states O'Connor.

"Correspondingly, the primary dynamic of capitalism changes form, from accumulation and growth feeding on an external domain, to ostensible self-management and conservation of the *system of capitalized nature* closed back on itself" (126). The industrial closed loop of animal rendering—and the rhetoric of industrial ecology accompanying it—is remarkably suggestive of such a tautological system of capitalized nature "closed back on itself."

Yet again, whereas Negri implies that ontological production and politics are coextensive with human social labor and life, Martin O'Connor embeds human life and labor within the larger problem of nature's subsumption. The "flow" between the time of life and the time of production that Negri theorizes can be placed within the broader purview of ecologized capitalism, a time of subsumption within which "capital is nature and nature is capital" (132). The production of this tautology is contingent, among other things, on a "semiotic expansion of capital" into nature and on the discursive production of nature as participatory subject (126). O'Connor recalls a parallel that Jean Baudrillard draws between the socialization of labor and of nature in the mid-twentieth century via his claim that "the doctrine of participation and of public relations [is now] extended to all of nature."87 Writes Baudrillard, "Nature (which seems to become hostile, wishing by pollution to avenge its exploitation) must be made to participate."88 Even if, as O'Connor argues, the command of a socialized, participant nature "operates primarily at the ideological, or social imaginary, level"—even if the image of a participatory nature is "a vicious fraud" and the ability to totally subsume nature an impossibility—a tautology of capital and nature is nonetheless at stake.89

Martin O'Connor maintains that, while "traditional Marxism followed liberal political economy in treating the 'natural' domains as external to capital and exogenously determined" (136), the challenge facing poststructuralist political ecology is to conceive of an immanent critique from within the time of nature's real subsumption. Indeed, ecological reckonings risk losing their antagonistic force in the immanent order of capitalized nature described by O'Connor. For the calculations, in capital's ecological phase, of its own damages—"all of these extra costs to be priced, and these reclamations of values to be taken into

account and conserved"—themselves are redeemed as a form of "good currency" insofar as they reproduce capital as an abstract universal (135). Inasmuch as capital takes the measure of its own ecological depredations—or represents the universal "unit of measure by which such an assessment might be made," as O'Connor writes (145)—we end up in a tautological trap similar to the one that Negri theorizes in relation to time as at once measure and substance of labor. Any attempt to challenge the rendering of capitalist nature, then, has to be sprung from inside the jaws of this tautological trap, one posing a seemingly impossible conundrum: saving nature has become synonymous with saving capital.

In the carnal business and rhetoric of modern industrial rendering, it is already possible, I have suggested, to glimpse the seeds of a tautological time of capitalist nature, one in which nature is indeed redeemed, through a conservationist logic of waste recovery, as capital. For Martin O'Connor, the 1992 Earth Summit in Rio de Janeiro provides the postmodern example of an enfolding of ecological discourses of conservation and sustainability into the system of capital. "The proclaimed objective of Rio 1992," he notes, "was to save the planet—to save natural heritage, cultural heritage, genetic diversity, vernacular lifestyles, and so on" (132). Yet the rhetoric of sustainability that achieved global currency around the period of the Rio Summit "[has become] an unheralded boon in capital's own project of enlarged reproduction" (128). For when "capital is nature and nature is capital," writes O'Connor, "the terms become virtually interchangeable; one is in every respect concerned with the reproduction of capital, which is synonymous with saving nature. The planet as a whole is our capital, which must be sustainably managed" (132-33).

In struggling to construe a retort to capital from inside this tautological trap, it is important to recall that Negri perceives tautological time as being "extraordinarily productive from the theoretical and revolutionary standpoint." Like Time, radical potentials accompany the death of transcendent Nature and its reduction to the historically produced nature, or "mere jelly," of exchange value. Nature, incessantly spatialized and essentialized in Western culture as a domain of ontology existing outside of history, comes into view as subject to time, as the

immanent substance rather than the external measure or form of history. While "mere jelly" suggests that the substance of exchange value is inert, homogeneous, and passive, in the very fact of nature's becoming subject to history there arises the radical possibility that nature might be produced differently, as the "collective substance" of communism. 91 Yet contesting the passivity implied within this image of the time of produced nature requires, among other things, opening the theoretical closed loop in Negri's work to include nonhuman actors in the collective, constitutive work of ontological production. 92 This is not the same thing as symbolically soliciting and socially fantasizing nature's participation, in the sense relayed by Baudrillard. For while both participatory and constitutive nature are a reflection of nature's immanent as opposed to transcendent ontological status, the former represents an effort to ideologically pacify nature ("which seems to become hostile") to the unifying rule of capital, whereas the latter represents an effort to recognize that life, time, and nature are composed of "a multiplicity of antagonistic subjects."93 Only when the multiplicity of nature is counted among these antagonistic subjects—only when the residual humanism of giving a human multitude all of the production credits for the immanent constitution of life worlds is contested within the praxis of communism itself—is it possible to truly do justice to the hope of realizing life as a collective substance.94

I want to end this chapter by returning to the example of oil that Negri raises in his brief nod to the problem of Nature's subsumption. I am struck by one significant difference between the example of oil chosen by Negri and the example of "mere jelly" posed by rendering. The difference is this: whereas fossil fuels are a nonrenewable resource, animal fats and oils are renewable, a distinction that arguably has some theoretical bearing on the analysis of tautological time. While Negri theorizes the passage from formal to real subsumption along the lines of a paradigmatic shift from a class politics of labor time to an ontological politics of human life time, it might further extend his analysis to rethink formal and real subsumption in their broader ecological entanglements with the nonrenewable and renewable resources of nature. Indeed, if the logic and history of industrial capitalism have been largely



coextensive with investment in and exploitation of nonrenewable fossil fuels, a logic of biopower can perhaps be said to emerge when the economic and ideological investments of capital shift onto the renewable "life" resources of nature. The modern rendering industry was ahead of its time insofar as it introduced this shift into a field of industrial capitalism otherwise predominantly invested in the extraction of nonrenewable resources.

By the turn of the twenty-first century, an economic and ideological shift in investment to the renewable resources of nature has become pervasive. New technologies of biocapitalism seek to command the renewability of nature not so much through the mundane recycling of animal remains as through knowledge/power over the genetic codes of life. The (formal) subsumption of nonrenewable nature, linked to discourses of scarcity around the depletion of nature as an external and exhaustible resource, is now widely supplemented by the (real) subsumption of renewable nature, linked to economies of sustainability serving the potentially infinite reproduction of capital's conditions of production. While the rendering industry would now appear to be an outmoded industrial player within the postindustrial nexus of biotechnologies and bioinformatics, it has ironically achieved new purchase in a greening marketplace speculating in post-fossil fuel futures. Under the shadows of peak oil production and global climate change, growing interest in biofuels rendered from renewable animal and vegetable sources has once again positioned the carnal business of rendering, oddly enough, at the resource frontier of capital. The present-day international rendering industry is more than eager to promote itself as a producer of biofuels, not only because it can smell the market potential but also because public concern over the pathological effects of feeding rendered material back to livestock has put pressure on the industry to seek other markets for animal by-products. In the late twentieth and early twenty-first centuries, global outbreaks of bovine spongiform encephalopathy (BSE, or mad cow disease) in animals and humans, traced to the tautological practice of feeding protein meals rendered from animal remains back to livestock, have placed the so-called invisible industry under public scrutiny (see the discussion of the practice of animal cannibalism in this book's postscript). This has prompted the industry to explore other ways it can recycle animal remains back into the market.

At the dawn of the twenty-first century, "biosecurity" is the new catchword of the rendering industry.⁹⁵ The connotation is that traffics in biological capital must be secured against pathological agents that threaten it from without, when in fact the pathological agent that poses the greatest threat, BSE, is an immanent product of its own closed loops. Securing biological capital against the pathological is ultimately a contradiction in terms because, as I will have cause to remark elsewhere in this book, the pathological is but another name for nature as an immanent materiality that proves to be far from passive. Through the rhetoric of biosecurity, moreover, the business of animal recycling allies itself with the rhetoric of security perpetuated by the second Bush administration in its war against terrorism. While the late twentiethcentury revolution in the life sciences and biotechnology has provoked a massive shift in capital investment to the renewable resources of nature, economic and ideological investment in nonrenewable reserves of oil persists for one reason: waging permanent war in the so-called defense of life depends on it. A comment relayed by Andrew Ross in his analysis of media images of the 1991 Gulf War clarifies the constitutive role of oil in a global economy of war: "Donella Meadows, co-author of the seminal 1974 Limits to Growth, pointed out in a Dartmouth College teach-in that there is only one activity in our society for which alternative energy could not provide a substitute for oil—war itself, especially war on the scale of rapid mobilization demanded by the Gulf War. The war, then, was fought, as Grace Paley commented, to ensure the future of war." The future of war, the "zero time" of total death that Negri identifies elsewhere in "The Constitution of Time" with the "nuclear State,"97 is deeply entangled in the carbon politics of capital's depletion of oil reserves and thus in the perverse destruction of its own ecological conditions of possibility. How can the environmental and social unsustainability of permanent war be reconciled with the biopolitical turn to renewable nature as capital's conditions of existence? Does not permanent war contradict Martin O'Connor's claim that, in an ecological phase of capitalism, the reproduction of capitalism becomes "synonymous with saving nature"?98 Is it possible that the material unsustainability of permanent war can be account-balanced, at least in the social fantasy of sustainable capitalism, by biocapitalism's powers of redemption and creation?

The renewable "life" resource on which the rendering industry capitalizes is, in the end, animal deadstock. It is because the rendering industry's parasitism on life is so literal, among other reasons, that the industry provides an exemplary case study of capitalist biopower. The literality of its industrial closed loops likewise provides a material example of tautological time that tests the limits of Negri's ontological politics and contributes to historicizing the problem of nature's subsumption. As for the other logic of rendering with which this chapter opened—the faculty of copying associated in twentieth-century cultural discourse with the timeless antics of aping and biological mimicry—it too can be historicized, as I have suggested, as a problem of subsumption, that is, as an immanent function of capital.

The case studies developed in the following chapters track how animals are materially reduced to mere jelly even as they are contradictorily rendered lively signs of technological mobility. Yet while this book's working supposition is that the economic and cultural logics of rendering do not transcend their productivity for capital, it does not abandon hope of resistance. It proposes, instead, that any resistance to animal capital will need to derive from inside the closed loops of tautological time. While it has become a theoretical commonplace to invoke immanent resistance within the discursive field of capitalism, the following chapters challenge the normative limits of immanent critique by refusing the assumption that it is constitutively human. Negotiating the dangers both of anthropomorphizing and of pathologizing nature, it is possible to trace how animal capital breeds forms of antagonistic life, often in the form of unpredictable, unruly, or diseased natures erupting within the substance of exchange value. Revising material history to include what Martin O'Connor calls "nature's resistance" involves not finding, but politically producing, signs of antagonistic nature as part of the collective work of changing time.⁹⁹

[Chapter 2]

Automobility: The Animal Capital of Cars, Films, and Abattoirs

The animal disappears in its suspension.

—Noëlie Vialles, Animal to Edible

The birth of Fordism is routinely sourced to the year 1913, when Henry Ford "set in motion the first example of assembly-line production in Dearborn, Michigan." In citing Ford's Highland Park plant in Dearborn as North America's "first example of assembly-line production," the moving lines that the plant materially mimicked are quietly displaced from historical consciousness. For rarely recalled or interrogated is the fact that Ford modeled Highland Park's auto assembly line on moving lines that had been operating at least since the 1850s in the vertical abattoirs of Cincinnati and Chicago, with deadly efficiency and to deadly effect.² Ford, deeply impressed by a tour he took of a Chicago slaughterhouse, particularly with the speed of the moving overhead chains and hooks that kept animal "material" flowing continuously past laborers consigned to stationary and hyper-repetitive piecework, devised a similar system of moving lines for Dearborn but with a crucial mimetic twist: his automated lines sped the assembly of a machine body rather than the disassembly of an animal body. The auto assembly line, so often taken as paradigmatic of capitalist modernity, is thus mimetically premised on the ulterior logistics of animal disassembly that it technologically replicates and advantageously forgets in a telling moment of historical amnesia.