FREEDOM & FOOD, SLAVERY & AGRICULTURE: A PHILOSOPHICAL ECOLOGY

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PROLOGUE

In September 1873 Frederick Douglass arrived in Nashville to address the Tennessee Colored Agricultural and Mechanical Association's third annual meeting. Noting the city's reputation for elegance and refinement, as well as its "patriotic associations during the late struggle for Union and liberty," Douglass nevertheless expressed doubts as to the propriety of his address. His work of the last thirty-five years had left little time for "the theory or the practice of farming," he said, worrying aloud about what he might have to say of benefit to the farmers and mechanics before him. Yet even for someone such as himself – accustomed to "doing extraordinary things for the first time" – the topic of agriculture offered some refuge from his ignorance, for with "few things perhaps, more than farming, does one find that there is nothing new under the sun." Indeed, Douglass says, as "one of the very oldest themes" the origins of agriculture "reach far beyond the limits of authentic history, for men tilled the soil long before they wrote books, and would have never written books if they had not tilled the soil." From this perspective,

[i]t is pleasant to know that in color, form, and features, we are related to the first successful tillers of the soil; to the people who taught the world agriculture; that the civilization which made Greece, Rome, and Western Europe illustrious, and even now makes our own land glorious, sprung forth from the bosom of Africa.¹

In this way, while "the Briton and Gallic races wandered like beasts of prey in the forest, the people of Egypt and Ethiopia rejoiced in well cultivated fields and abundance." If the significance of this fact has been a "special cause for complacency" for peoples of

¹ F. Douglass, "Address before the Tennessee Colored Agricultural and Mechanical Association," in *African-American Social and Political Thought, 1850-1920*, ed. H. Brotz (New Brunswick, 1992), 284-293. All subsequent citations from Douglass in this section are drawn from this source.

African descent, it is doubtless due a particular developmental narrative systematically conflating civilization with whiteness.

This memory, however, is less important than its recognition in practice, which Douglass praises with their vocational congregation. Associated as free men in pursuit of self-interest, their organization was a signal to the world of a decisive departure from the "stagnation of a by-gone condition," indicating a readiness to "march under the banner of liberty with the more advanced peoples of the earth to higher plains of civilization, culture, and refinement." Yet immediately after emancipation, he recalls, the prevailing attitude across the South was "let the Negro starve!" And though such explicit sentiment is seldom heard any more, "it is still felt, and is active in a thousand ways to our hurt." Such sentiments held back wages, prevented access to property, barred membership from unions, trade associations, educational institutions, and otherwise prevented respectable employment, all on "the theory that the Negroes – like the Indians – will ultimately die out." So even as abolition freed the slaves legally and politically, the habits of a former order continued to prevent the progress – and indeed to control the actual lives – of these new citizens, effectively "killing them" through privation. "Let the Negroes starve!" he concludes, "thus executes itself."

Thus in this, their "first meeting since the revolution," Douglass admits it is not so much "agriculture in general" that concerns him, but how agriculture can serve the interests of a people lately emancipated from a slavery so overwhelmingly agrarian, of a people so recently "ranked by the laws of the land with horses, sheep, and swine, and like these to be held and bought and sold." How, he asks, can the institutions and practices so rapidly associated with their recent enslavement be reconstructed to serve the interests of

a "laborious, joyous, thoughtless, improvident people, just released from their thralldom, and with just such necessities as agricultural life will secure?" Under such circumstances, Douglass says:

I hail agriculture as a refuge for the oppressed. The grand old earth has no prejudices against race, color, or previous condition of servitude, but flings open her ample breast to all who will come to her for succor and relief. Agriculture is simply the act of cultivating the ground so as to secure its largest and best product for sustaining life and health. There are special and pressing reasons why we, of all the people of the United States, should master this great art. It is our last resort, and if we fail here I see not how we can succeed elsewhere.

While the political revolution may be over, the social and economic revolution was just beginning. "A dog will scratch his neck long after his collar is removed," Douglass notes in closing; "[t]he illusion is kept up when its cause has departed," as neither masters nor slaves are able to "abandon all at once the deeply entrenched errors and habits of centuries." In this way, he proclaims: "Emancipation has liberated the land as well as the people," for as "the very soil of your State was cursed with a burning sense of injustice," it must be renewed, "cultivated by liberty," if "the new order" is to prevail. Should it not, the "fault will not be due to the new order of liberty, but to the old order of slavery," not to "any inherent defect of the principle of liberty, but to the inherent disposition of despotic power to supplant freedom."

In the remainder of his address, Douglass offered his fellow citizens of former bondage some concrete advice. From the kind treatment of animals to the proper care of tools, from the need to maintain a happy home to the need for manures to replenish the soil, Douglass seeks an educative redress to the consequences of slavery. Crucial to this process were increasing literacy rates and the rehabituation of everyday practices that made slaves "but living machines." Emphasizing the need for a "theory of work" to work well, Douglass argued for an education of experience itself that would transform toil into work, and work into the play of human cultures. But Douglass also challenges them with the strong recommendation to acquire property. Recognizing the apparent irony he nevertheless insists property is necessary for the survival of this people, cast as resident aliens in a land still burning with the injustices of slavery, concluding "without property, there can be no leisure. Without leisure, there can be no thought. Without thought, there can be no invention. Without invention, there can be no progress."

* * *

I begin with Douglass for the way his address illustrates and integrates the central themes of this project. For Douglass and audience, the meanings of freedom were inextricably linked to the conditions of their recent enslavement. That novel forms of agency were possible for these newly born citizens, Douglass is certain; but to limit their content to the political and economic registers of free citizen and free labor, he argues, occludes how their realization turns on the satisfaction basic human needs. Yet, as Douglass recognizes, new dependencies coincide with new freedoms, at once transforming these new citizens into subjects of powers beyond their control. So while the formal, legal abolition of slavery was no doubt necessary to realize those inalienable rights of life, liberty and the pursuit of property, Douglass insists on its insufficiency, as the powers of sentiment and habit are just as strong as the powers of law and politics.

In this way, the political importance of agriculture rests in its potential to secure a subsistence outside those orders organized to produce such privation. For Douglass, the lack of basic human necessities – as well as the means for their procurement – evacuates the substantive possibilities of freedoms from within, by means of a continuous coercion over life and its reproduction. By linking the practices of agriculture to the politics of slavery, Douglass theorizes the conditions required for specific experiences of freedom as inextricably linked to the practices necessary for the reproduction of human life. Drawing on a long tradition of linking the realm of freedom to the realm of necessity, Douglass there departs from many of his predecessors who – despite acknowledging the importance of everyday life in theory – ultimately fail to integrate such aspects into the actual practice of everyday life. Because the satisfaction of basic human needs is a necessary precondition for those experiences known as freedom, the settled cultivation of the soil is a common nursery for culture, and a native provision ground for politics.

Food is thus always political precisely because its acquisition and consumption already intersects specific forms of power. To figure this intersection of production and power, Douglass invokes a particular narrative of agriculture and its relationship to the development of human societies. The broad contours of this narrative coordinate the advent of civilization with the transition from nomadic bands of hunter-gatherers to sedentary tribes of agrarian-pastoralists. As a necessary condition for civilization, farming provided the surpluses for people to live in greater population densities in permanently inhabited territories, which in turn enabled the growth of villages, towns, and cities, as well as long-distance trade and the relative differentiation of cultures. In relating the culture of the soil to the culture of the book, moreover, Douglass intimates

how all such developments antedate that other civilizational achievement – writing – by tens of thousands of years (or more), and when it appears its topics are largely comestible and agricultural in nature, while its primary subjects are slaves.²

By invoking this narrative, however, Douglass both reinscribes and undermines its traditional functions of legitimation for the development of civilization. While using this narrative to justify the importance of agriculture for the peoples of African decent, that is, Douglass at once inverts the racialized hierarchy of bodies associating whiteness with humanity and culture, and blackness with animality and nature. In so doing, Douglass identifies what is otherwise an obvious inconsistency of this narrative, namely, if agriculture marks the advent of those aspects of human culture associated with civilization, it is the paler tribes to the north that wandered in the wilderness like "beasts of prey" as Africans built the first cities and states. By redeploying the central norms of this narrative, then, Douglass subverts the conventional construal of black skin within a semiotics of nature in the service of an argument about the original color of civilization.³

Yet Douglass recognizes such subversions are insufficient, for the freedoms at stake for he and his audience were firmly rooted in the soils of agrarian slavery. Despite the fields of American agriculture being so recently the scene of violence and subjugation – and the provision grounds the home of resentment, irony, and subterfuge – Douglass argues for a "small farm theory" that takes neither the land nor the practices used in its cultivation as inherently oppressive. Rather, those "special and pressing reasons" for mastering the agrarian arts are precisely those relating to its particular enabling potential

² D. Schmandt-Besserat, "The Envelopes That Bear the First Writing," *Technology and Culture* 21:3 (1980): 357-385; "Decipherment of the Earliest Tablets," *Science* 211 (January 1981): 283-285.

³ K. Anderson, "The beast within': race, humanity, and animality," in *Environment and Planning D: Society and Space* 18:3 (2000): 301-320.

to shape the patterns of social life for any given society. In many ways, the powers intersecting slavery and agriculture dehumanize slaves and masters alike; in its proto-industrial form slavery under plantation capitalism shattered any potentially sympathetic bonds between master and slave. For slaves in such agrarian societies, freedom is often figured by the possibility of alternative subsistence; that is, slaves could imagine freedom precisely because they could survive – and indeed thrive – beyond the bonds of slavery. Freedom thus requires not only the juridical abolition of slavery, but reconstructing social habits to engender new forms of agency. Such a reconstruction is not an option moreover, for without them the readiness to "march under the banner of liberty" is futile.

As Douglass addressed those black farmers and artisans that day, however, the white community of Nashville had their own visions of progress. Only months before "Commodore" Cornelius Vanderbilt announced his first (and only) major philanthropic gift to establish a university in his name and as a symbol of his legacy. Entrusting the million-dollar gift to a young Methodist bishop (also the cousin of his second wife), Vanderbilt considered it "a duty that the North owed to the South, to give a substantial token of reconciliation that would be a benefit," to which he would contribute by founding an institution of higher learning. Having amassed his fortune in the shipping and rail industries then at the forefront of the American industrial revolution, Vanderbilt aimed to give the South an educational institution as the means of political and economic reconstruction. Yet only four generations prior to accumulating what remains one of the largest hoards of wealth in the nation's history, Vanderbilt's New World patriarch moved from Holland as an indentured servant, or white slave, exported by the Dutch West India Company. As Nell Irvin Painter notes with respect to the significant traffic in Britons to

North Africa throughout the mid-seventeenth century, it is difficult to remember that, for "more than a millennium, the vast story of Western slavery was primarily a white story." Between 1619 and 1800 – i.e., months prior to the first twenty Africans arriving in the Americas in chains aboard a ship named *Jesus* and the advent of the transatlantic slave trade – some half to two-thirds of all European immigrants to the British colonies arrived under this particular form of personal bondage.⁴

In this way, while Vanderbilt's ancestors were neither alone nor unique, unlike the Africans brought to the Western hemisphere in conditions of bondage, white slaves were able to improve their collective and individual circumstances over time. One of the central conditions of this difference, of course, lay in a uniquely developed and insidiously entrenched ideology of race, which justified slavery through a naturalized hierarchy of bodies that was codified by the institutions of a nation ostensibly founded on the "universal rights of man." While the contours of this ideology track the various physiognomies of African descent, its legitimating functions turn on a range of norms and concepts concerning difference and similitude in a naturalized developmental narrative of human culture. Vanderbilt's white skin was, in other words, the social currency enabling the disambiguation of race and class required for his American lineage to improve its collective in social and economic condition. In this sense, the rise of Vanderbilt in three generations from indentured servitude to one of the richest men in the world is part and parcel of the American drama staged in Nashville that day. With hard work and resolve, Vanderbilt "pulled himself up by the bootstraps," so to speak, from the condition of white

⁴ T. Stiles, *Tycoon* (New York, 2009), 531; E. Foner, *Reconstruction* (New York, 1988), 18-19; A. Stuart, *Consuelo and Alva Vanderbilt* (New York, 2007), 12; N. Painter, *The History of White People* (New York, 2010), 38, 42; R. Warren, *The Legacy of the Civil War* (New York, 1961), 2; L. Bennett, Jr., *Before the Mayflower: A History of the Negro in America* (Johnson Publishing, 1962), 29-30; W. Alexander, *History of the Colored Race in America* (Negro Universities, 1968), 166.

slavery to the summit of white freedom. And, indeed, with the Commodore as its symbol this period also marks a crucial moment for capitalism, the triumphal march of which over slavery and other forms of economic unfreedom legitimates its development as the expression of universal freedom unfolding in the progress of human history.⁵

With Douglass as its symbol, however, this period also marks what is commonly understood to be the beginning of the end to this iniquitous institution. At least in the United States – among the last colonial nations to abolish slavery – the half million lives lost in the Civil War is often construed as the morally necessary and politically sufficient sacrifice to redress the injustices of its national institutionalizations. So while the moral victory of emancipation lay in the juridical abolition of slavery, the economic victory of Reconstruction lay in freeing the worker to appear on the free market to sell labor "freely" to live. Douglass and Vanderbilt thus embody two concepts of freedom the semantic and substantive contestations of which remain live questions for contemporary politics. On the one hand, as a former slave of African descent, the abolitionist and public intellectual Douglass exemplifies the moral victory of the Civil War, and the advent of freedom for some four million Africans brought to the "land of liberty" in chains. On the other hand, as the descendant son of white slaves, the industrial capitalist and one time philanthropist Vanderbilt represents the economic victory of Reconstruction, and a decisive moment in the development of American capitalism. Between the political freedoms associated with civil rights following the Civil War and the economic freedoms associated with capitalism following Reconstruction, then, Douglass and Vanderbilt cut contrasting figures for a singular concept whose meanings are still in the making.⁶

⁵ E. Wood, *The Origins of Capitalism* (London, 2002), 11-32.

⁶ C. Ogletree, "Repairing the Past," Harvard Civil Rights-Civil Liberties Law Review, 38 (2008).

INTRODUCTION

KEYWORDS AND WAYPOINTS

In this dissertation I examine the relationships between freedom and slavery through the intersections of food and agriculture. Qualified in various ways, contemporary research across disciplines continues to support the view that, before agriculture, hunters and gatherers lived in relatively egalitarian societies wherein wealth was communal and hereditary inequality nonexistent. Interrogating the basic arc and assumptions of this narrative, in this project I analyze how the human practices surrounding the acquisition, production, distribution and consumption of food intersect specific forms of political power. In this way, my aim is to articulate a political theory of subsistence, or a theory of subsistence politics, in order to reconstruct the relationships of freedom and food on the one hand, and slavery and agriculture on the other. My thesis is that the experiences of freedom held as central to human nature and politics are inextricably linked to specific configurations of power operative within the realm of human necessity. As necessary elements of biosocial reproduction, food and agriculture are constitutive elements of the realm of necessity, and as the central place through which the habits of human agency are transmitted across generations, the human household is its contingently universal form. In this way, I argue that the realm of human necessity in general – and the various activities attendant the biosocial reproduction of everyday life in particular – constitutes a general economy of domination and dependence, as well as a vital ecology for cultivating new forms of resistance and radicalism.

My aims in this project are simultaneously critical and reconstructive. First, I develop a genealogy of agricultural slavery through the intersection of theories of human nature central to traditional developmental narratives of Western freedom. Second, by way of this account I elaborate a reconstructive analysis of concepts of freedom and the conditions of food production that relates various forms of domination and dependence in the realm of human necessity to the powers operative on the body and the body politic. By analyzing the forms and functions of agrarian slavery from prehistory to the present, I contribute to the transdisciplinary scholarship tracing the origins of freedom in the West through its continuity in institutions and practices of enslavement. From its origins in the Greek *polis* to its further development in the Roman republic, from its rebirth in the modern European nation-state to its migration to the New World, the continuity of its traditions of enslavement have been rationalized and legitimized by a historiography of freedom wherein liberal forms of democratic politics are the apogee of progress and the West's beneficent cultural gift to humanity. Western philosophers have long held and relied upon this traditional narrative, deploying its claims in various ways to support their respective theories of human nature. My aim thus involves interrogating this narrative, analyzing its normative assumptions, and reconstructing its consequences for the theory and practice of politics.

In this project I argue that the narrative linking agriculture and civilization belies the ways mastery, violence and domination are central to both. In doing so I examine whether agriculture is a sustainable human subsistence strategy, analyze the value of freedom from an ecological point of view, and argue that capitalism is a recombinant form of enslavement. In contrast to some traditional philosophical anthropologies seeking

the essential *what* of human nature, in this project my method is a philosophical ecology seeking the relational *how* of human experiences in particular places and times. In an examination of the ways in which the experiences of freedom turn on the practices of slavery proper to the realm of contingent human necessity, I situate agriculture as a basic form of biopower and subsistence as inextricably linked to sovereignty. I argue that acquiring and consuming food is central to the experience of agency precisely because its production and consumption always involves a particular network of powers, already organized in place through time for specific ends.

In what follows I elaborate the basic keywords and waypoints central to my analysis in this project, which focuses on freedom and slavery, food and agriculture, from the beginnings of human speciation to the rise of civilization in the prehistoric and ancient Near East. This dissertation is the first of five parts tracing the intersections of freedom and food, enslavement and agriculture, from prehistory to the present. In Parts I and II, I establish the basis from which to consider the prehistoric and ancient bases of sovereignty and biopower. In Parts III and IV, I extend my analysis to include agriculture as a form of modern biopower and capitalism as a recombinant form of enslavement. My aim is thus less a history of democracy than a genealogy of those theories of human nature that have made, and continue to make, democracy possible. It is the cognitive dissonance produced by the continuity of enslavement and freedom that motivates my developing conceptual tools to analyze and reconstruct the consequences for their intersections from the long past to the present future.

Freedom and Slavery

At least in the West – where the steady march of freedom is a central trope and triumph – enslavement is supposed to be a thing of the past. Yet at the end of the twentieth century more humans lived as slaves than ever before in history, with some 27 million people estimated to work under conditions of violent coercion without pay. Such figures are merely numerical, of course, and do not reflect the proportion of those living under conditions of modern-day enslavement. According to Kevin Bales, contemporary slavery differs from its historical counterparts in a number of ways, not the least of which is the lack of property status recognized by national and international laws. Contemporary enslaved people differ in availability and cost as well; according to Bales, they are cheaper than ever before, and can be purchased in some parts of the world for as little as ten dollars. Another difference is the duration. Unlike institutions that defined a permanent or semi-permanent condition, many contemporary slaveries last only a matter of years, some just a few months. With historically low prices and relatively temporary status, modern-day slaves are a crucial form of disposable capital in the global economy. While several nations are well-known for their connection to contemporary enslavement, striking is its continued prevalence in the developed world. The number of slaves in the United States, for example, is estimated to be between 100,000 and 150,000, with the Department of Justice prosecuting seven major anti-slavery cases since 1997 alone, including the most recent resulting in a federal grand jury indictment for "slavery, pure and simple."

¹ E. Skinner, *A Crime So Monstrous* (New York, 2008), xvi; K. Upadhyaya, "Bonded Labor in South Asia," in C. van den Anker, ed., *The Political Economy of New Slavery* (New York, 2004), 118-136; K. Bales, *Understanding Global Slavery* (Berkeley, 2005), 17, 40-68, 9; quoted in *U.S. vs. Navarrete*, No. 11-20880. U.S. Court of Appeals, Fifth Circuit, December 3, 2012; for a critique of the methodology, see "The

Such statistical caveats, however, work to expose a rift as old and ordinary as the institution of slavery itself. As Orlando Patterson shows in his comparative analysis of the institution, there is nothing particularly peculiar about slavery. Patterson explains:

It has existed before the dawn of human history right down to the twentieth century, in the most primitive of human societies and in the most civilized. There is no region on earth that has not at some time harbored the institution. Probably there is no group of people whose ancestors were not at one time slaves or slaveholders.

Enslaved peoples are present in the earliest social formations and among most primitive peoples; they were among the first items of trade, and the institution was well-established across prehistoric and early ancient civilizations.²

In a sense, then, the "invention of slavery" was a crucial development in human social evolution, as the practice of enslavement was possible only in certain conditions, including conditions of food surpluses, having an effective means of subduing captives, and having social norms to distinguish captors and captives. In many societies there was no fixed social status for the enslaved, only varying degrees of subordination and exploitation. Before slavery could be institutionalized, then, certain individuals had to have a sense that forcing others into subordination could actually succeed. In this sense, the "invention of slavery" required the simultaneous development of both *concept* and practice: by marking off some as alien, thus as generally enslaveable, individuals could

Peculiar Institution," Scientific American (April 2002): 4: T. Wolff, "The Thirteenth Amendment and Slavery in the Global Economy," Columbia Law Review, 102, 972; see also K. Bales and R. Soodalter, The Slave Next Door (Berkeley: UCP, 2009); T. Brass, Towards a Comparative Political Economy of Unfree Labor (London: Frank Cass, 1999).

² Patterson, Freedom, 11-12; Guilaine and Zammit, Violence in Prehistory, 42-44; Flannery and Marcus, *The Creation of Inequality*, 187.

then be forced into labor and subordination, which then created a stigma of enslaveable that – together with the reality of social status – worked to naturalize the slave as fact. In fact, the condition of enslavement was not simply limited to the duration of one lifetime, but once connected to particular traits could be affixed to any formerly free group to transform the social status of both they and their progeny in perpetuity.³

In this way, the invention of enslavement required the prior development of techniques for permanent subordination as well as concepts inclusive of dominated and dominant before the social relations of enslavement were acceptable. Beyond new ways to brutalize other humans, that is, the critical innovation turned on marking a category of person as eligible for wholesale domination. Overwhelming evidence indicates that this process was first developed on female prisoners of war and perfected through institutions of marital exchange and concubinage. For much of early human social history, then, it was women and children captured during war and incorporated into the households of their captors who were the first to endure the total powerlessness of enslavement. As concepts derive from experience, the experience available to men prior to the large-scale institutionalization of enslavement was the domination of women and children. In this sense, the oppression of women and children both antedates slavery and makes it possible. The role adult-child relations, sexual asymmetries, and gendered divisions of labor from which kinship relations emerged to structure society were such that, in particular, women were exchanged in marriage with only limited rights to their person. The reproductive potential of women was an exchangeable commodity acquired for the service of producing new families; it is quite plausible, then, that women were considered less autonomous than men. At the advent of state formation and the founding of social

³ R. Winks, ed., *Slavery* (New York, 1972), 5-6.

hierarchies, men almost certainly observed the particular form of greater vulnerability in women and children, and learned differences were useful in separating groups.⁴

Many theorists attempt to define the nature and etiology of slavery. For example, Patterson theorizes enslavement through the concept of "social death," which he defines as "the permanent, violent, personal domination of natally alienated, generally dishonored persons." As "the loss of ties of birth in both ascending and descending generations," natal alienation sunders the enslaved from their home and community, rendering them homeless and inhuman not by a revocation of social ties – which are often strong if illegitimate – but by a general destabilization of genealogical memory that produces the *slave*. In this way, for Patterson slavery is a relation of domination that is perpetual and inheritable, but not necessarily inherited. Along with physical tools of violence, the social relations of slavery require instruments of symbolic domination, social norms of enslavement, and effective means of coercion.⁵

Despite the persistence of contemporary enslavement, the last time a proportion of people worldwide lived as slaves was 1861. That year citizens of the United States held some 3.8 million humans as chattel property. Just a century earlier, at the height of the Atlantic slave trade, while that nation founded on life, liberty and the pursuit of happiness imported the smallest portion of the nearly 12 million Africans brought in chains to the New World, by 1825 the United States of America possessed the largest proportion of slaves in the Western hemisphere. In this way, the practices of enslavement in the Americas were intensifying at such a rate as to become the primary basis of economic development precisely as the social values of freedom were becoming the clear end of

⁴ Lerner, *The Creation of Patriarchy*, 76-78.

⁵ Patterson, Slavery and Social Death, 9, 7.

politics and the true good at which citizens aimed. As Susan Buck-Morss notes, that the political theorists and philosophers of the European Enlightenments were articulating the key concepts of political and individual freedom at the very moment colonial slavery was being revived at an unprecedented rate, scale, and intensity is variously explained as an economic necessity of time or an unfortunate historical contingency of place. At the same time as *slavery* was also deployed as a rhetorical trope to salvage the moral authority, or to legitimate the essential import, of the concept of *freedom*.

Such attempts to maintain the moral authority of *freedom* are significant insofar as very few societies before the nineteenth century found slavery particularly objectionable. Not only is there a venerable philosophical tradition linking slavery with nature – and later natural law – there is an equally influential theological tradition relating slavery to the fallen, sinful character of human nature. David Brion Davis notes how, as the Western mind increasingly turned to history for moral guidance and self-understanding, "it became imperative to reconcile the revival of slavery in modern times with various theories of human progress." The "inherent contradiction of slavery," he notes, "lay not in its cruelty or economic exploitation, but in the underlying conception of man as a conveyable possession with no more autonomy than a domestic animal."

In this project, I analyze the institution of slavery in two ways: as a form of historical and economic organization, and as a cultural register, or symbolic economy, in which slavery functions as collective memory, rhetorical tool, and conceptual resource. I focus on the conditions and consequences of slavery between reproduction and representation, not simply because cultural memory has a politics, but because concepts

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⁶ Patterson, Slavery and Social Death, vii; S Buck-Morss, Hegel, Haiti, and Universal History, 21; Davis, The Problem of Slavery in Western Culture (Oxford, 1966), 13, 62.

and language are inextricably bound to history and theory. As Saidya Harman and Stephen Best show, for example, the theories and practices of enslavement have multiple locations and diverse applications, requiring a new kind of attention to the relations and intersections of material and symbolic culture. So despite references to traditional ways of understanding enslavement – e.g., enslaved status, captivity and compulsion, slaves as speaking tools or the hands of others, the master-slave relation, the economics of slavery – my aim throughout is not so much to generate new insights as to move from this well-researched terrain to the inheritances of slavery in the present.

I thus follow Tim Armstrong in referring to a "culture of slavery" that is more than mere rhetoric, that is continuously associated with the continuity of enslavement and the hegemony of race in Western history, and that is ultimately juxtaposed to the violence and exploitation produced when imposed on bodies and societies. Through a process similar to that cited by Derrida in his rejection of the strained conceptualization of "the animal," at many points the limits of language highlight the forced abstractions of "the slave" as an object of value, its reification, negation and consumption, the uses of enslavement in difference labor regimes, the instrumentalization of enslaved bodies within concepts technology and labor, as well as the hermeneutic and philosophical consequences of these figurations. Precisely because enslavement presents so many ways of thinking about humanity, animality, nature, culture and technology, it is imperative to situate the theories and practices of slavery in terms of those canonical philosophical

anthropologies so central to thinking about what it means to "use" other humans, or to "humanize" nonhuman animals and machines.⁷

In so many instances the transposition of meaning from metaphors articulated or enforced more or less self-consciously as simile – for example, slaves are *like* machines or slaves *owe* labor to masters – to a more hidden understanding of the same equation informing yet another hidden, more subterranean set of metaphors requires my analysis to move back and forth between the literal and the figurative, the synchronic and diachronic. Each is linked with actual, historical instantiations of enslavement and the conceptual consequences of narrative closure for philosophies of freedom in the West. While the slaveries of ancient Greece and the American South are indeed "over," in other words, "the slave" and slavery remain – and indeed have never departed – yet assume new guises in discursive registers of humanity, animality, technology and nature, to name but a few. Between metaphor and modality, then, I examine the consequences of these figures and figurations as they are inscribed into an metaphysics of presence central to Western philosophy and culture. The traumas of slavery are not only real but continuous as well – especially for that tenuous, inconclusive experiment in democracy known as the United States of America – constituting the basis for collective identity and memory in registers too numerous to list.

So while many approach the task of theorizing enslavement from the standpoint of its putative abolition somewhere in the late nineteenth century, I argue such efforts remain firmly embedded within a naïve historiography of freedom. If the ostensible elimination of slavery from that time to the present is rejected – as I do here – the aim of

⁷ T. Armstrong, *The Logic of Slavery* (Cambridge, 2012), 1; for more on typology, see P. Munz, *The Shape of Time* (Middletown, 1977); Munz, *Where the Golden Bough Breaks* (London, 1973); S. Hartman, *Scenes of Subjection* (New York, 1997); S. Best, *The Fugitive's Properties* (Chicago, 2004).

developing a set of conceptual tools around *slavery* becomes a theoretical corruptive and corrective against an otherwise ubiquitous preoccupation with the derivative concept freedom. Imbricated deep in the discursive fabric of the West, the shadows cast by enslavement continue to form the horizon against which the light of its freedoms shine.

Between theory and history, freedom functions to unify that otherwise disparate and rather derivative set of traditions known simply as "the West." Indeed, the very idea of some one thing called "the West" is relatively new – dating to seventeenth century Europe – and relies in significant ways on this narrative identifying freedom as its unique political value. From its purported origins in ancient Greece to its rebirth in modern Europe, from its migration to the Americas to its alleged culmination in that ongoing democratic experiment known as the United States, the coherence of this tradition depends on a historiography of freedom that figures the origin and development of democratic politics as the embodiment of progress and the culmination of human nature.

As Patterson demonstrates, however, the basis of this continuous commitment to freedom is enslavement. Freedom as the central social value of Western politics emerged, in other words, directly from the West's continuous experience with the institutions and practices of enslavement. "People came to value freedom," he writes, "to construct it as a powerful shared vision of life, as a result of the experience of, and response to, slavery or its recombinant form, serfdom, in their roles as masters, slaves, and nonslaves." Freedom "began its career as a social value in the desperate yearning of the slave to negate what, for him or her, and for nonslaves, was a peculiarly inhuman condition." For Patterson, what has not been fully recognized or appreciated is "the critical fact that the idea of freedom has never been divorced from this, its primordial, servile source." So in stark

contrast to the ubiquity of freedom in scholarship and politics, there is a perspicacious lack of attention to the theories and practices of enslavement whose institutionalizations comprise, by way of continuous and constituent negation, the primary source of the most cherished political value in the West.⁸

Central to the analysis of enslavement is the concept of *power*. In this regard, I follow Michel Foucault in elaborating the analysis of power along two main axes – sovereignty and biopower – the significant differences of which turn on their respective relationships to life and death. While sovereignty is the power to make die and let live, biopower is the power to make live and let die. With the power to kill and enslave on the one hand, and the power to enliven and abandon on the other, Foucault traces the distinct yet interdependent trajectories of such powers from the classical theory of right to the modern theory of discipline. Inverting Clausewitz's proposition about politics and war, Foucault argues politics is the continuation of war by other means. For Foucault, then, any analysis of power must be framed by the war relation: domination is the force of war, and law is born of war, not nature. Less thing than function, power "circulates" and "lives," diffused across the social body by "relatively autonomous and infinitesimal" techniques. Power as such thus does not exist; there are only consequences of power, or "power-effects," the most important of which for Foucault is subjectivity itself. Rather than intentions and decisions, then, this analysis of power occurs at the level of the formation and constitution of subjectivities, first into the infinitesimal mechanisms of articulation that each have their own histories, trajectories, techniques and tactics, and

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⁸ S. Buck-Morss, *Hegel, Haiti, and Universal History* (Pittsburgh, 2009), 148; Patterson, *Freedom, vol. 1.*, xiii, xiv, 9; see also, M. Finley, *Ancient Slavery and Modern Ideology*, B. Shaw, ed. (New York, 1998).

then into how those mechanisms of power are invested, colonized, used, inflected, transformed, displaced and extended into other recombinant forms of domination.⁹

For Foucault, the shift in theoretical concern from sovereignty to biopower is thus not simply a conceptual one, but entails an entirely new concept of the subject that is decoupled from the traditional juridical category of *person*. "For millennia," he writes, "man remained what he was for Aristotle: a living animal with the additional capacity for a political existence; modern man is an animal whose politics places his existence as a living being into question." With this claim Foucault inaugurated the contemporary discourse of biopolitics, and with it a new biopolitical subject educated by a range of novel political technologies. There are three basic elements to Foucault's theory of power. First, there is an effective relation of domination, or how subjects are produced, cultivated, manufactured; second, there are various structures of power, including global strategies of domination with local tactics of appropriation and exploitation; third, there are the technologies and mechanics of power necessary for actualizing the ends of particular structures of power. Foucault seeks to understand how the early effective identification of individual bodies is consequent upon the micro-mechanics of power and its technologies of behavior. 10

Food and Agriculture

When considering the role of food in the social organization of the species, it is critical to note that hominids subsisted by hunting and gathering for more than ninety-nine percent of their evolutionary history. While some three million years separate the first tool-using

⁹ Foucault, Society Must Be Defended, 15-17, 29-30.

¹⁰ R. Esposito, *Bios*, T. Campbell, trans. (Minneapolis, 2008), 33.

hominids from the cave artists of 20,000 years ago, during this entire time humans lived by foraging on a daily basis, often moving with the seasons, following the life-cycles of the plants and animals on which their lives depended. Around 10,000 years ago, however, people across the world began to settle down into stationary communities, shifting their subsistence strategies to a few domesticated plants and animals. From this small group of flora and fauna, the largest and most complex civilizations were erected and fed. In fact, while thousands of crops have been important resources, a mere six genera of plants — wheat, barley, millet, rice, maize, and potatoes — account for the main caloric energy of the major civilizations of the world. ¹¹

Not only was the transition to agriculture widespread and rapid, it occurred independently at approximately the same time. In a few millennia, between roughly 10,000 and 3,500 years ago, people all over the world began cultivating crops on a large-scale and establishing economies on agricultural foundations. For purposes of definition, agriculture is a subsistence strategy with near total reliance (typically seventy-five percent or greater) on domesticated plants and animals. As such, modern humans are neither the only agricultural species, nor even completely agricultural themselves, for nearly all modern humans continue to derive at least some of their sustenance from the seas, forest and other non-domesticated sources. Different from symbiosis, agriculture involves one species manipulating the reproductive cycle of another at the level of the

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¹¹ R. Wenke and D. Olszewski, *Patterns in Prehistory*, 5th ed. (New York, 2007), 230; M. Blumler, "Ecology, Evolutionary Theory and Agricultural Origins," in D. Harris, ed., *The Origins and Spread of Agriculture and Pastoralism in Eurasia*, 25-44;

individual organism. With the exception of mechanization, food "production" akin to agriculture is observed in all its forms in other species, mostly insects.¹²

In this regard, it is important to make several distinctions at the outset. In its most general and common usage, *agriculture* is any effort to modify the environments of plants and animals to increase productivity and usefulness for those doing the modifications. Strictly speaking agriculture is a subset of *horticulture* – the activity of growing plants from seed, bulbs, shoots, etc. – and involves cultivating plants in fields prepared by tillage and plowing. On the other hand, *pastoralism* and *husbandry* involve the care and management of animals, often grazed extensively across landscapes. Thus, horticulture is to plants as husbandry is to animals, and the varieties of agriculture and pastoralism turn on the technologies of domestication and production central to each.¹³

For the last forty centuries, every major civilization has integrated horticulture and husbandry, agriculture and pastoralism. Agriculture and pastoralism are inextricably linked through the agro-ecological functions of livestock. Not only do domestic animals transform plant and animal material into otherwise unavailable edible proteins or useful products, they return vital nutrients to the soil in the form of manure. From confinement husbandry to transhumant pastoralism – or semi-nomadic grazing with the seasons – the management of excrement takes many forms, which in turn gives rise to sundry ways of storing and distributing the wealth of the soil. Livestock also function as a type of "living storage" for surplus and byproducts, held back as food for lean years, that allows the "banking of surplus" to mitigate erratic environmental conditions. After domestication of

¹² B. Hayden, "Nimrods, Piscators, Pluckers and Planters," *Journal of Anthropological Archaeology* 9 (1990): 31-69; B. Hayden, "Domestication," in Price and Gebauer, eds., *Last Hunters, First Farmers* (Santa Fe 1995) 277

¹³ M. Blumler and R. Byrne, "The Ecological Genetics of Domestication and the Origins of Agriculture," *Current Anthropology* 32:1 (1991): 23-54.

large stock such as cattle, oxen and horses, animal traction dramatically altered the role of livestock in agriculture.¹⁴

Across the world the first sedentary societies emerge in a variety of ecosystems, all abundant in resources. From river estuaries to coastal regions, from mountains to river valleys, semi-permanent human habitations began in areas of high topographical and ecological diversity that create small areas of highly diverse land. Asymmetries of natural resources, population density and potential labor led to competition between proximate groups of early agrarians and hunter-gatherers. Encounters were often violent, or at least filled with the suspicion and contempt that accompanies most uncertainty and fear. In fact, violence was a clear feature of hunter-gatherer societies in Mesolithic Europe and Asia. The first evidence for conflict is thought to have been precipitated over territory bordering the Nile, which was rich in resources. The traditional domestications originate around a core of recurring traits that are now associated with "complex hunter-gatherers." Such traits include sedantism, storage, high population densities, resource diversity, requisite technologies for processing and harvesting, as well as a good pool of potential domesticates. The first proto-farmers emerge in large forager societies rich in resources, accompanied by an intensification of subsistence technologies, increasing sedantism, and new norms of circumscription and hierarchy. 15

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¹⁴ Ofek, *Second Nature*, 205-226; B. Winterhalder and D. Kennett, "Behavioral Ecology and the Transition from Hunting and Gathering to Agriculture," in Kennett and Winterhalder, eds., *Behavioral Ecology and the Transition to Agriculture* (Berkeley, 2006), 3; K. Flannery, "Origins and Ecological Effects of Early Domestication in Iran and the Near East," in P. Ucko and G. Dimbleby, eds., *The Domestication and Exploitation of Plants and Animals*, 87.

¹⁵ Guilaine and Zammit, *The Origins of War*, 76, 62; N. Thorpe, "Origins of War," *British Archaeology* 52 (2000): 8-13; B. Hayden, "Research and Development in the Stone Age," *Current Anthropology* 22 (1981): 519-548; B. Hayden, "Pathways to Power," in *Foundations of Social Inequality*, T. Price and G. Feinman, eds. (New York, 1995), 15-85.

The origins of agriculture are traditionally located just after the last ice age, in the so-called "Neolithic Revolution" around 10,000 years ago. In this time the hoe, spear, yoke, chisel and reaper appear, as do villages, chiefdoms and cities. Neolithic humans invented the metal plow and techniques of working copper and bronze; they invented the pottery wheel, kept and bred cattle, and participated in the local and long-distance trade of crafts, metals and spices. As the Neolithic began, humans were already effectively harnessing fire for the cultural productions of food and war. These advancements enabled more sophisticated weaponry and tools, including those for agriculture, fishing, and the domestication of plants, animals, as well as other human beings. Technical innovations enabling weapons to inflict greater damage over greater distances were first applied to animals, and then to other humans. From blunt projectiles to throwing-poles, early weapons were hand-held such as rocks, sticks, cudgels, and the club, and some such as bolas were projected at their victim. While the spear was used by the upper Paleolithic, the bow was more effective, further mechanizing human aggression. Likely invented at the end of the upper Paleolithic (50,000-10,000 years ago) with the last great hunters, only in the Mesolithic (20,000-9,500 years ago) is there clear evidence for bow-use. ¹⁶

Based largely on evidence from the Levant, the origin of agriculture is typically portrayed as a mythic, heroic event occasioning the rise of cultures, cities, and empires. The advent of the four traditional "Old World" civilizations is associated with large-scale, irrigated agriculture: within a relatively short period between 5,500 and 3,800 Y.B.P., dense forms of human habitation sprout from the alluvial plains of Mesopotamia,

¹⁶ V. Childe, *Man Makes Himself* (New York, 1951 [1936]), 66-85; D. Hillel, *Out of the Earth* (Berkeley, 1991), 63-70; H. Ofek, *Second Nature*, 36, see also chs. 4-5; M. Sahlins, *Stone Age Economics* (Chicago, 1972), ch. 1; H. Hole, "A reassessment of the Neolithic revolution," *Paléorient* 10:2 (1979): 49-60; B. Bronson, "The earliest farming," in *Origins of Agriculture*, C. Reed, ed., (The Hague, 1977), 23-48; J. Diamond, *Guns, Germs, and Steel* (New York, 1997), 269.

northwest Africa, the Indus Valley and northern China. Despite different crops, methods and social divisions of labor, the transition from a rain-fed system of cultivation to one irrigated by a centralized network of canals and authorities was key to their development.

It is now well-established, however, that agriculture had at least six independent, autochthonous origins in the Levant, Sub-Sahara Africa, northern China, eastern North America, Mesoamerica, and South America between 13,000 and 8,000 years ago. Ample evidence also suggests the transition to farming was far from heroic, and in fact even painful, marked by malnutrition, injury and famine. The life of early farmers is expressed in their bones; small overall size, knobby joints, thinning bones, abscesses and caries all point to bodies with dietary deficiencies. There is considerable loss of diversity in human foodstuffs due to the specializations of agriculture. In this way, food production entailed ever-increasing interdependence among individuals and communities.¹⁷

Civilization neither began at a single moment nor in a single place, of course, nor is its associated urbanism inherently superior. Cities were constructed in response to real and perceived threats and fears. One of the most important forces of biosocial evolution is competitive interaction. While many elements were long in place – for example, walls for defense 8,500 years ago, irrigated fields 7,300 years ago, streets 7,000 years ago and secular grain silos between 6,500 and 5,600 years ago – not until some 5,300 years ago did temples, two-story houses for elites and reed and clay houses for commoners appear. In short, competition was the real engine of change. ¹⁸

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¹⁷ Ofek, *Second Nature*, 213; J. Diamond, "Evolution, Consequences and Future of Plant and Animal Domestication," *Nature* 418 (2002): 700-707; K. Flannery, "The Origins of Agriculture," *Annual Review of Anthropology* 2 (1973): 271-310; see also D. Henry, *From Foraging to Agriculture* (Philadelphia, 1989); B. Smith, *The Emergence of Agriculture* (New York, 1998).

¹⁸ K. Flannery and J. Marcus, *The Creation of Inequality*, 473-474, 15, xi.

The transition to agriculture is important for two reasons. First, as a subsistence strategy agriculture requires more time and energy per calorie of food than foraging or fishing or hunting. Feasible only under relatively stable conditions – both climatically and socially – the temporal delay between the investment of capital and labor involved in agriculture has significant consequences for social relations and political organizations. Second, because reproductive restraint is a cross-cultural – indeed pan-species – response to adversity, uncertainty and scarcity, with the transition to agriculture basic human social dynamics shift decisively to include a marked increase in economic stratification, the rise of hereditary inequality, the development of a general division of labor, and the founding of state-level political units.¹⁹

Until recently there were two general types of explanations for the transition to agriculture: oasis-competition and cultural evolution models. Whereas the former emphasizes exogenous factors such as demographic pressure and environmental change, the latter emphasizes endogenous factors linked to cultural and technological change. Among the first to propose the oasis hypothesis, V. Gordon Childe argued domestication began as an aridity-driven symbiosis between humans, plants and animals precipitated by close contact around oases as the climate grew warmer and drier at the end of the Pleistocene (c. 11,700 years ago). Another exogenous model, the "hilly flanks" theory, was proposed by Robert Braidwood based on a series of excavations at an early (c. 6500 B.C.) agrarian settlement in the hills of northern Iraq. According to Braidwood, agriculture began in the middle flanks of the Tarus and Zagros mountains because the flanks provided a wide range of ecotones in a relatively compact geographical area,

¹⁹ B. Trigger, *Sociocultural Evolution* (Oxford, 1998), 216; and R. Allen, "Agriculture and the Origins of the State in Ancient Egypt," in *Explorations in Economic History* 42:2 (1997): 135-154; T. Llewellyn, *Political Anthropology* (Westport, 2003), 52.

allowing people to shift vertically on the hillsides to adjust to the rapidly changing environment.²⁰

Demographic dynamics, particularly population growth, were also important. With varying degrees of emphasis on different aspects, most demographic theories turn on the basic insight that, as sedentary populations grew beyond local carrying capacities, the turn to agriculture was the only way to sustain living populations, let alone support further growth. Evolutionary theories view agriculture as an adaptation of plants and humans, starting with domestication by protection of wild plants and animals and ending with location-specific species and full-fledged domestication. The "feasting model" suggests agricultural technologies were driven by ostentatious displays of power such as feasts. Regardless of the explanatory theory, the central issue is not what people ate, but how and why people chose to exploit the food resources that they did.²¹

After the widespread adoption of agriculture between 10,000 and 40,000 years before the present, the global human population has doubled every thousand years or so. At the end of the last ice age, the population of human beings on the planet was roughly four million. By the time of Socrates, Buddha, and Christ, it was two hundred million. Two thousand years later it has reached seven billion people, almost a fifth of all the

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²⁰ V. Childe, New Light on the Most Ancient East, 4th ed. (London, 1952); see also. R. Pumpelly, Explorations in Turkey, the Expedition of 1904 (Washington, D.C., 1908); R. Braidwood and L. Braidwood, eds., Prehistoric Archaeology Along the Zagros Flanks (Chicago, 1983); R. Braidwood, "The Agricultural Revolution," Scientific American 203 (1960):130-141.

²¹R. Claiborne, *Climate, Man, and History* (New York, 1970), 239; M. Cohen, *The Food Crisis in Prehistory* (New Haven, 1977), 279; L. Binford, "Post-Pleistocene Adaptations," in *New Perspectives in Archaeology*, S. Binford and L Binford, eds. (Chicago, 1968), 313–342; D. Rindos, *The Origins of Agriculture* (Chicago, 1987); B. Hayden, "Fabulous Feasts," in *Feasts*, M. Dietler and B. Hayden, eds. (Washington, D.C., 2001), 23-64; B. Hayden, "Models of Domestication," in A. Gebauer and T. Price, eds., *Transitions to Agriculture in Prehistory* (Madison, 1992), 11–18; J. McCorriston and F. Hole, "The Ecology of Seasonal Stress and the Origins of Agriculture in the Near East," *American Anthropologist* 93 (1991):46-69; A. Moore and G. Hillman, "The Pleistocene to Holocene Transition and Human Economy in Southwest Asia," *American Antiquity* 57:3 (1992): 482-494; C. Scarre, "The World Transformed" in *The Human Past*, C. Scarre, ed. (London, 2005), 188; P. Richardson, *et al.* "Was Agriculture Impossible during the Pleistocene but Mandatory during the Holocene?," *American Antiquity* 66:3 (2001): 387–411.

human beings to have ever walked the earth. Since the glaciers of the last ice age retreated, then, the number of people on the planet has increased one-thousand fold. In this way, once agriculture became the primary subsistence strategy for humans there was no turning back; by the time agriculture was central to human culture, a majority of people depended upon its surplus for survival. As such, for its early practitioners agriculture was a double-edged success: by preventing those who lived by its means from starving in periods of hardship and stress, it also provided the necessary surpluses for population growth during periods of relative abundance. Yet it was also a double-edged dependency: by incorporating the contingencies of nature (i.e., climate and topography, plants and animals) into human subsistence and cultural artifacts.²²

Thus the vicious spiral begins. More land and larger herds create increasing economic disparities; profits accumulate by work and fortune, transferring across generations the power to leverage life-prospects. Agrarian and pastoral inequality intensify as initial wealth is entrenched, amplified by future generations who enjoy fewer structural barriers. We might expect rebellion on the part of less privileged subjects to prevent the new regime of heritable wealth from taking hold, yet they do not. While agriculture had multiple autochthonous origins, it was remarkably resilient wherever it was established. The transition to social inequality was thus neither fragile nor contingent. Any "reversions" to foraging feeding ecologies were thus exogenous, forced on agrarian societies from the outside; as Peter Bogucki notes, several complex, stratified societies grew less so over time, but never fully returned to foraging. In this sense, while

²² Montgomery, Dirt, 36; Bogucki, The Origins of Human Society, 193-195.

the record is by no means unidirectional, the trend clearly suggests that once societies commit to agriculture, stratification develops in proportional intensity to cultivation.²³

The dramatic transformations associated with the Neolithic did not change human social life all that much, or at least not all at once. Only with the emergence of chiefdoms would the political ethos of humanity shift from egalitarian to hierarchical, and with them the rise of certain men and their families was institutionalized as legitimate. As everlarger social units emerge, increasingly large numbers of what Michel Foucault termed "docile bodies" are created by the transfer of concepts and practices from domestication of the wild to the domestication of society. From its inception, agriculture has been both a material practice and a type of knowledge produced by practice; its history is at once a history of ideas and a history of actions in and through which change occurred – economic, environmental, social or political. Putting agriculture at the center of this project is meant to attend to changes in materials and concepts. Methodologically, the emphasis on practice is now well established in the history and sociology of the sciences, which leads to a more attuned focus on the material basis of research. The plants and animals of biological research are altered by humans environmentally or physically to do "unnatural" things, but they are not literally machines. They occupy a form of "edge habitat," ecotone, where organisms with their own natural histories come into contact with and are shaped by the technological, industrial environments of human beings. The farmer does not always think first and act accordingly; change can arise from the practices of experimentation and spontaneity; there is no separation of the manual and

²³ J. Diamond, "The Worst Mistake in the History of the Human Race," in *Applying Cultural Anthropology*, A. Podolefsky and P. Brown, eds. (Mountain View, 1991), 72-75; R. Manning, *Against the Grain: How Agriculture Hijacked Civilization* (New York, 2004), 23-41.

intellectual reshaping of the world, its potential, or what a "living technology" might mean.

Rather, at each point I aim to bridge specificity and particularity to the more general question of life and technology, food and politics, agriculture and slavery. Medium and event are the materials and methods through which humans and animals have been, and continue to be, reorganized as living cultural technologies. Within agrarian scholarship, there are many case studies yet few synthetic works that aim to weave local analyses into a more comprehensive narrative. Rather than generalize from case studies, my method has been to do highly specific interdisciplinary work on the general intersection of agriculture and slavery. A result of this approach made traditional agrarian literature an object of research in itself; rather than on the lives of individuals or the events of history, my focus is on how and why the relationships of freedom and food on the one hand, and slavery and agriculture on the other, have been articulated within and across a tradition of discourses I refer to as philosophical anthropology. Rather than coincidence, recurrence is at the heart of this narrative. As Hannah Landecker notes, recurrence is not reappearance of the same or a return of the repressed, "but a set of emphases with which to recognize a genealogy that has always been there. The details of the development of a particular technique are ordered by emphases on those practices that exploit and explore the plasticity of living things."²⁴

²⁴ H. Landecker, *Culturing Life: How Cells Became Technologies*, (Cambridge, 2009), 1-8; Foucault, *The History of Sexuality, vol. 1*, 143-154; P. Pauly, *Controlling Life: Jacques Loeb and the Engineering Ideal in Biology* (Berkeley, 1990), 4-9.

Sovereignty and Biopower

The ancient Greeks lacked a single term for the contemporary concept *life*. On the one hand, *zoe* refers to the simple fact of life common to all living beings, i.e., *bare life*, whether they be animals, men, or gods. On the other hand, *bios* refers to the form or way of living proper to an individual or group, i.e., *qualified life*. The upshot of this distinction is decisive for both Foucault and Agamben, as each trace its origins and consequences for politics to Aristotle's famous phrase that man is by nature a *politikon zoon*, or political animal. In the classical world *zoe*, or simple natural life, is excluded from the *polis*, relegated to the *oikos*, or household. Thus, for Aristotle, the philosophically relevant category was not *zoe*, or simple natural life, but the qualified, particular way of life proper to human beings. In this way, both Foucault and Agamben need a firm line between *bios* and *zoe*, for without this distinction neither of their projects are viable. For both Foucault and Agamben, that is, the distinction between bare life and qualified life grounds the difference of two fundamentally different poles of political power.

At the beginning of *Homo Sacer* Agamben argues for a stable distinction between *zoe* and *bios* that serves to structure his entire inquiry. In categorizing humans as *zoon politikon*, he argues, Aristotle was designating a qualified form of life, and so by joining *zoon* and *politikon* was identifying a certain threshold. For Agamben, the "political" of Aristotle's *politikon zoon* is not "an attribute of the living being as such, but rather a specific difference that determines the genus *zoon*." For Agamben, the phrase implies "an inclusive exclusion of *zoe* in the polis, almost as if politics were the place in which life had to transform itself into good life and in which what had to be politicized were always already bare life." For Western politics, "bare life has the peculiar privilege of being that

whose exclusion founds the city of men." Agamben thus argues the Aristotelian definition of the *polis* as the opposition between life (*zen*) and good life (*eu zen*) requires reappraisal. For Agamben, however, this opposition is at once a relation of implication: the opposition between life and good life is simultaneously an implication of bare life in politically qualified life.

The first important question, then, concerns the constitution of Western politics through the structural dyad of exclusion and inclusion of bare life. "What is the relation between politics and life," Agamben asks, "if life presents itself as what is included by means of an exclusion?" Agamben must either show a tenable distinction between an attribute and a specific difference, or he must admit that Aristotle had already identified how politics could – in certain cases, namely, that of man – qualify or even take hold of *zoe* as bare life. To accept the latter would mean that what both Foucault and Agamben claim as quintessentially modern – i.e., the specific biopolitical character of modernity and its power – was already at work within Aristotle and his theory of politics.

I follow Derrida in being unable to differentiate between the attribute of the living creature as such and the specific difference determinative of the genus *zoon*. In this sense, Aristotle's definition indicates the way in which the attribute of the living being as such (i.e., Agamben's bare life) for man is politics; the bare life of the living creature called *human* is political – that is the specific difference. The distinguishing attribute of the life of man – in his life as a living being, in his bare life if you will – is to be political. Like Derrida, I do not argue that "nothing new is happening 'today'." For even if it were possible to distinguish whether that day is now, or even modernity, it would be wrong to argue there is nothing new about biopower. Rather, biopower it not new. There are

important novelties in the modern expressions and effects of biopower, but biopower – which is actually more precisely *zoopower* – is absolutely not new. Biopower is thus an arch-ancient form of power that is inextricably linked to sovereignty. In this way, Derrida rightly notes, Agamben wants to have it all and, "giving nothing up," wants to be twice first; "the first to see and announce, and the first to remind." Agamben, that is, seems to argue both that biopower has just emerged for the first time, while claiming at once to be identifying it for the first time at its true origin.²⁵

Agamben's linguistic caveats about the Greek use of bios are striking because the very phrase on which he grounds his claim – man as a political animal, zoon politikon – is precisely such an exception. In this sense, Agamben's use of biopolitics and biopower is equivocal at best, and decidedly confused at worst, for what he actually intends in this theory is zoo-politics and zoo-power. Agamben is talking about the intersection of bare life – the common fact of living – with the state and its sovereignty. Indeed, as Derrida notes with respect to Agamben – and which I point out is the same for Foucault – they each want to have it both ways. Agamben, for example, argues that biopower is simultaneously arch-ancient and "the decisive event of modernity," while Foucault tries to argue sovereignty and biopower are historically and conceptually distinct. In this sense, I agree with Derrida that even for Aristotle there was no such clear and distinct line. We must remain on the threshold, so to speak, and inquire rather into that desire for the threshold that drives us to seek it in the first place. Following Derrida, perhaps my central "philosophical" aim is to destabilize the specifically modern character of biopower. There may indeed be something novel or important about its specifically

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²⁵ Foucault recognizes this much in the phrase "with the additional capacity." Agamben, *Homo Sacer*, 1-2, 6-7; J. Derrida, *The Beast and the Sovereign*, 326-327, 329-330.

modern – and, I would add postmodern – instantiations, but biopower is not a "new" form of power, but perhaps a force co-constitutive with "life" "itself," far wider than the human species. Foucault:

If one can apply the term *bio-history* to the pressures though which the movements of life and the processes of history interfere with one another, one would have to speak of *bio-power* to designate what brought life and its mechanisms into the realm of explicit calculations and made knowledge-power an agent of transformation of human life. It is not that life has been totally integrated into techniques that govern and administer it; it constantly escapes them.²⁶

And this connects with sovereignty, for the irony of Agamben's equivocal juxtaposition of the simultaneously arch-ancient and decidedly modern origins of biopower is his use of Hesiod and Pindar to think the relationship of *bia* and *dike*, or violence and justice. This is precisely why the question of beast and sovereign – of animality and the powers specific to humanity – comes to figure so central a place in the work of Derrida later in life. Yet, like Aristotle, perhaps even Derrida is, in the end, unable to cross this threshold, incapable of deciphering so many signs traced along the way he paved. Or, perhaps, biopower is already beyond the threshold of the species, which is to say sovereignty is less arch-ancient than trans-species; it precedes the human and follows the social forms of life wherever they settle on the earthly landscape, and no doubt beyond when the time comes. In what follows, then, I trace only the broadest outlines of such powers here and there, and only with pain and difficulty, using the grunts and guttural longings mimicking that which we long to remember and to live again.

²⁶ Derrida, *The Beast and the Sovereign*, 33; Foucault, *History of Sexuality*, 143.

Despite the common designation of Foucault and Agamben as biopolitical theorists, then, an important set of differences in fact places their concepts in fundamental tension. While Foucault aims to disambiguate sovereignty and biopower, Agamben collapses the distinction, reducing the latter to a "state of exception" in the tradition of Carl Schmitt. By contrast, for Foucault sovereignty remains historically and conceptually central to modern politics, yet over time is recontextualized and subordinated to a new form of governmental practice. For Agamben – and others such as Rancière – the result is an over-formalized symmetry between sovereignty and biopower, the figure of the sovereign and *homo sacer*, both of whom exist at the limit of juridico-political environs in which they are simultaneously included and excluded, inscribed within the law either by violence or abandonment, force or exposure. Jonathan Elmer notes how this symmetry leads Agamben to dismiss and disavow the corporeality that humans share with all nonhuman life; Agamben, that is, remains so enthralled by the "hyperbolic opposition between meaningful life and mere animality, between power and the absolute powerlessness of 'bare life,' that a trace of contempt edges into his description of those reduced to the later condition." Indeed, his contempt is often more than a trace. 27 Even sympathetic readers like Rancière see this as a problem for Agamben; by subsuming under the "sign of the same" historical embodiments such as refugee camps, immigrant holding facilities, the extralegal prison at Guantanamo and much else, he takes and assimilates all to the fundamental paradigm of the Nazi death camps as "the 'nomos' of modernity." Within this highly abstract space, moreover, both dominators and dominated

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²⁷ *Homo Sacer*, 133-134.

"appear as two parts of the same 'biopolitical' body," with the diametrical poles of state of exception and bare life appearing as "a sort of ontological destiny." 28

In more recent work, however, Agamben appears to be attempting to address this very problem, calling for a "suspension of the suspension" within the "anthropological machine," which forever reconjugates and reinscribes the relation of bios and zoe, human and animal. In "our culture," Agamben writes,

man has always been the result of a simultaneous division and articulation of the animal and the human, in which one of the two terms of the operation was also what was at stake in it. To render inoperative the machine that governs our conception of man will therefore mean no longer to seek new – more effective or more authentic – articulations, but rather to show the central emptiness, the hiatus that – within man – separates man and animal, and to risk ourselves in this emptiness: the suspension of the suspension. Shabbat of both man and animal.

According to Dominick La Capra, Agamben articulates here a sort of "postsecular negative theology *in extremis*," an "empty utopianism" suspect precisely because of "the linkage among an extremely negative – if not nihilistic – conception of the existing social, political and cultural reality," all articulated within a "desire for the reenchantment of the world." This formalism on the part of Agamben thus results in a covering over of the differences between political, ethical and institutional intersections, a homogenization directly consequent on circumscribing the realm of the "genuinely" political. Thus, Le Capra concludes, any attempt by Agamben to mitigate the legacies of

Subject of the Rights of Man?," South Atlantic Quarterly 103/2-3 (2004): 300; Elmer, "Torture and Hyperbole," 30; for an example of the contempt Agamben has, see *Homo Sacer*, 133-134.

²⁸ G. Agamben, *Homo Sacer*, D. Heller-Roazen, trans. (Stanford, 1998), 84; J. Rancière, "Who Is the

slavery or apartheid, for example, or object to the genetic exploitation of "life," would be entirely unintelligible as actual historical or even political activities.²⁹

In Part I of this project, "Domestication and Domination," I analyze how sovereignty and biopower are at least as old as the human species, perhaps even archancient. Rather than the constitutive *nomos* of modernity, my aim in this chapter is to explore how these forms of power are arch-ancient, perhaps even trans-species. I analyze how prehistory and primitivism constitute the context for traditional philosophical anthropologies on the one hand, and the contemporary scientific epistemologies of the human species on the other. In Chapter 1, "Domesticity and Mastery," I examine the formation of the human reproductive unit around the synthetic adaptations of meat and fire, the development of hunting and gathering as a human subsistence strategy, and the emergence of the human household as the contingently universal reproductive unit. In Chapter 2, "Foraging and Inequality," I examine the social dynamics attendant the transition from egalitarian foraging to hierarchical farming. In Chapter 3, "Agriculture and Exploitation," I trace the coalescence of the state around certain forms of extensive agriculture. Along with the state, of course, are concomitant forms of structural inequality, including slavery. In Chapter 4, "Pastoralism and Dominion," I examine nomadic and semi-nomadic forms of pastoralism as forms of resistance to the centralizing powers of the agrarian state. Hebrews and Egypt. Throughout I argue that domestication, as well as the metaphorical apparatus subtending its development, are critical technical and symbolic components of civilization and its ideological edifice of knowledge. Agriculture necessarily involves the modification of organisms through selection and control, but the extension of global markets in the late nineteenth century expanded this

²⁹ Agamben, *The Open*, pp. 91-92; LaCapra, *History and Its Limits*, p. 165.

archaic practice into a means for labor coercion. Cotton, for example, acquired its useful industrial traits insofar as the biological process of reproduction was controlled from planting to harvest and beyond. West African palm oil, by contrast, was much more flexible – biologically and socially – and thus became central to the political and economic autonomy many west Africans enjoyed between the end of slavery and the beginning of colonization. In this sense, importing American cotton to Africa entailed introducing an exotic form of biosocial control. Increasingly, African farmers were incorporated as members of specific races and ethnicities into a regime of biological and social control that also included a range of engineered crops and the smallholds on which they were grown. As the concept of *race* became increasingly important for stabilizing nascent capitalist markets, the onus fell to the only force more mobile and transient than capital itself: sexual desire. Sexuality, that is, provided an important means of rebellion against the capitalist household.

Capitalism produced not only the stability of biosocial identities, the fixity of fields and houses, it also undermined the constraints on which the political economy of empire depended. Authorities used racial identities to integrate individuals into specific places in an order of capitalist production, which after slavery was based on cash and contract. The kinship systems of race stabilized capitalism in many parts of the world, but capitalism also destabilized these systems, sometimes even producing that dreadful and hopeful flash of bare capitalism, or what Marx wrote, a moment when "all that is solid

melts into air." Capitalism has created a thousand ways to trap workers, but also a thousand ways for worker to revolt, and ultimately, to expropriate the expropriators.³¹

"[A]s perhaps nowhere else in biopolitical history," Carey Wolf notes, the modern factory farm is exemplary of contemporary practices of maximizing control over life and death, or "making live." Practices such as eugenics, artificial insemination, selective breeding, pharmaceutical enhancement, and inoculation. For Wolf, Derrida and others, it is thus clear "that 'the animal' is, today – and on a scale unprecedented in human history - the site of the very ur-form of that *dispositif* and the face of its most unchecked, nightmarish effects." While factory farming is very good at producing edible plant and animal products at the lowest possible cost, a recent Pew Commission report highlights strong economic data indicating the economic viability of industrial agriculture turns requires externalizing medical and environmental costs to consumers – e.g., salmonella, antibiotic resistance diseases, polluted water, food poisoning and some cancers. In 2008 the Union of Concerned Scientists listed the direct and indirect social costs linked to industrial agriculture and factory farming. From 1997 to 2005, for example, U.S. taxpayers gave CAFOs some 3.8 billion dollars a year with "indirect" subsidies that artificially reduced the price of beef, poultry and pork.³²

As Dona Haraway and others have analyzed, the increasingly pervasive use of gene markers, "estimated breeding values" (EBVs), and other genetic knowledge in industrial agriculture in particular, and the contemporary biosciences more generally, is

³⁰ D. Rogers, Atlantic Crossings (Cambridge, 1998); A. Schäfer, "W.E.B. Du Bois, German Social Thought, and the Racial Divide in American Progressivism, 1892-1909," Journal of American History 88 (2001): 925-949; J. Herbst, *The German Historical School in American Scholarship* (Ithaca, 1965). ³¹ K. Marx, *Capital*, vol. 1., B. Fowkes, trans. (New York, 1992 [1867]), 929. K. Marx and F. Engels,

Manifesto of the Communist Party (1848).

³² Wolf, Beyond the Law, p. 46; Derrida, The Beast and the Sovereign, p. 71-72; N. Kristof, "Cleaning the Henhouse," New York Times, Sept. 1, 2010.

just one significant example of this. While on the one hand such practices are construed by state institutions and private corporations as key to modernizing and rationalizing livestock husbandry, on the other hand – as Paul Rabinow and Nikolas Rose argue – these practices have simultaneously given rise to new forms of resistance in "biosocial collectivities" that form in response to scientific discourses of power-knowledge on the basis of a common experience with the blindness and oversimplification of these new epistemic regimes. Indeed, as Wolf is concerned to emphasize, the significance of EBVs and genetic markers is these biosocial collectivities incorporate nonhuman animals as coconstitutive with humans in resisting the elaborations of a biopolitical *dispositif* in and through the bodies spread over place and time.³³

The biopolitical scope of contemporary industrial agriculture and factory farming is both deep and wide. The paradigm of immunity and the protection against disease are but one exemplary field of potential inquiry. More than 80 percent of the total antibiotics used annually in the U.S., for example, is administered to livestock on factory farms; in North Carolina alone, in fact, more antibiotics are used on animals every year than the entire human population of the nation. Following Esposito, Agamben and others, when vast animal epidemics pose a threat to national biosecurity, the specter of an "animal Holocaust" begins to emerge. Esposito: "as in all areas of contemporary social systems, neurotically haunted by a continuously growing need for security, this means that the risk from which the protection is meant to defend is actually created by the protection itself." Rather than individuals, or even "bodies," contemporary forms of biopower increasingly

³³ EBVs are a statistical representation of an animal's "genetic merit" based on standardized measurements (an animal's weight at *x* days old, or the depth or percentage of fat in a particular part of the animal's body, etc.), whereas genetic markers focus on actual genetic locations in the animal's genome associated with various traits such as meat tenderness; L. Holloway and C. Morris, "Contesting Genetic Knowledge-Practices in Livestock Breeding," *Environment and Planning* 10: *Society and Space* 30:1 (2012).

act at the level of the flesh, which Esposito argues is "nothing but the unitary weave of the difference between bodies. It is the non-belonging, or rather the intra-belonging, which allows what is different to not hermetically seal itself up within itself, but rather, to remain in contact with its outside." Even as Nietzsche realized, then, the distinction between human and animal is no longer adequate within such a lexicon. Flesh thus becomes the communal substrate shared by humans with other forms of life in and through which "the body" is both sustained and threatened, and the more we attempt to maximize the former through the micrological manipulations of biopower, the more the threat increases. In this sense, it is impossible to clearly differentiate the sense of the political when the use of industrial, confinement animal feeding operations to feed the humans of the planet – and, even if it were, it is an impoverished version of the political.³⁴

Opposing factory farming constitutes a new schema of politicization, not just in resisting the formative dispositifs of modern biopolitics, but also in articulating with other dimensions of political resistance, such as opposition to the commodification and private ownership of life in the services of late capitalism. As Nicole Shukin notes, regardless of political orientation, the problem with the concept *biopolitical* is twofold: first, it "bumps up against its own internal limit at the species line"; and second, biopolitical analyses have been "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." As Shukin makes clear, the question of the animal that biopolitics ignores is not just conceptual or analytical but material, involving not just "the semiotic

³⁴ Wolf, *Beyond the Law*, 50; M. Foucault, "Power Affects the Body," in *Foucault Live*, S. Lotringer, ed. (New York, 1989), 211; on organization versus structure, see H. Maturana and F. Varela, *The Tree of Knowledge*, R. Paolucci, trans., foreword by J. Young, rev. ed. (Boston, 1992), 46-47.

currency of animal signs," but also "the carnal traffic in animal substances." The private ownership and manipulation of animal bodies, where they "are reproductively managed as protein and gene breeders under chilling conditions of control," are crucial to the flows of speculation and investment in biocapitalism. Moreover, phenomena like mad cow disease and avian flu make clear "the formerly distinct barriers separating humans and other species are imaginatively, and physically, disintegrating under current conditions of globalization." ³⁵

Taking seriously such questions poses rather direct political challenges and radicalizes biopolitical thought in ways not possible if we remain within the usual purview of anthropocentrism. For example, consider the immediate practical consequences of eliminating the legal designation of animals as property. Matthew Calarco: "On this political terrain, neohumanist arguments concerning the merits of the democratic tradition have little if any weight. Even if one were to inscribe animal rights within the democratic liberatory narrative of expansion and perfectibility (as is sometimes done), such gestures can only appear as tragicomic in light of the massive institutionalized abuse of animals that contemporary democracies not only tolerate but encourage on a daily basis." Yet one thing is clear: such practices are part of a matrix that, under conditions of globalization, increasingly takes as its political object planetary life itself, at the level of the flesh, and they constitute a biopolitics that encompasses and

³⁵ N. Shukin, *Animal Capital* (Minneapolis, 2009), 11, 7, 12, 46; for an example in the liberal vein, N. Rose, *The Politics of Life Itself*, 255, 167, 257; for an example in the post-Marxist tradition, see P. Virno *A Grammar of the Multitude*, I. Bertoletti, trans. (New York, 2004), 81-84; see also S. Kühl, *The Nazi Connection* (New York, 1994), 13; on the bestiary lexicon, see Friedlander, *Origins of Nazi Genocide*, 14-16; E. Kogon, H. Langbein and A. Ruckerl, eds., *Nazi Mass Murder* (New Haven, 1993), 13; Kühl, *Nazi Connection*, 19; Breitman, *Architect of Genocide*, 188, 407; R. Höss, *Commandant of Auschwitz* (Cleveland, 1959), 230; Friedlander, *Origins*, 61, 48, 71, 206-208, 241-243, 238, 232, 239-241; see also, R. Lifton, *The Nazi Doctors* (New York, 1986), 52.

conjoins the putatively opposed political regimes of liberal democracy, fascism and communism. The exponential expansion and routinization of mechanisms and logics from Chicago slaughterhouses to the assembly lines of Ford to the Nazi death camps and back again. ³⁶

Note on Method

Central to this project is the claim that within every concept there lurks an ineliminable human figure. Often in the shadows, fulfilling its silent but vital role as the precondition and purpose for thought, at times this figure emerges into the light of day. In this sense, every theory contains a figure in relief whose form follows the contours of *Homo sapien*, that knowing animal whose nature is the flesh and blood of thought. From and between the sinews of disparate human bodies – living, working, loving and dying under the same sun, where novelty is scare and communion required – human experience is nevertheless unified by a contingently global condition that is sustained and reproduced through the necessities of a common though diverse world. It is through and above all *for* this animal

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³⁶ M. Calarco, *Zoographies* (New York, 2008), 97; J. Lukas, *Budapest 1900* (New York, 1988), 63; P. Gunst and L. Gaál, Animal Husbandry in Hungary in the 19th-20th Centuries (Budapest, 1977), 11-15, 22-30, 46; A. Voros, "The Age of Preparation: Hungarian Agrarian Conditions between 1848-1914," in The Modernization of Agriculture: Rural Transformation in Hungary, 1848-1975, ed. J. Held (Boulder, 1975), 112; D. Goodman, B. Sorj, and J. Wilkinson, From Farming to Biotechnology: A Theory of Agroindustrial Development (Oxford, 1987), 179; Kühl, The Nazi Connection, 20, 53; E. Black, IBM and the Holocaust (New York, 2001), 9; Proctor, "Nazi Biomedical Policies," 27; F. Redlick, Hitler (New York, 1999), 125, 107; J. Roth and M. Berenbaum, eds. *Holocaust* (St. Paul, 1989), 197; J. von Lang, *The Secretary* (New York, 1979), 200; B. Smith, Heinrich Himmler (Stanford, 1971), 67-165; Z. Bauman, Modernity and the Holocaust (Ithaca, 1989), 114; J. Weiss, Ideology of Death (Chicago, 1996), 272.; Foucault, Society Must Be Defended, 80-83; K. Davis, The Holocaust and the Henmaid's Tail (New York, 2005), 5, 16, 11, 12; Esposito, Bios, 129-130; Singer, "Ethics beyond Species and beyond Instincts," in Animal Rights, C. Sunstein and M. Nussbaum, eds. (New York, 2004), 91; B. Sax, Animals in the Third Reich (New York, 2000); J. Derrida, The Animal That Therefore I Am, M.-L. Mallet, ed., D. Wills, trans. (New York, 2008), 26; Agamben, Homo Sacer, 171; Esposito, Bios, 137; Davis, Holocaust and the Henmaid's Tale, 9; C. Patterson, Eternal Treblinka (New York, 2002), 53, 72; M. Calarco, Zoographies (New York, 2008), 97; see also G. Nou, Studies in the Development of Agricultural Economics in Europe (Uppsala, 1967).

its needs and desires, its limits and potentials, its hopes and fears – that particular
 attempts to order the flux of experience to enable effective understandings, to consecrate
 meanings, and to facilitate the transmission of habits and practices across generations.

Even when increasingly removed from their conditions of origin in the course of everyday life, then, concepts are always artifacts of human life, already rooted in that particularly fertile common ground called "human nature." In this inquiry I take philosophical anthropology as the attempt to find a difference that makes a difference in the nature of the *human* animal. Traditional answers include language, symbolism, writing, reason, mathematics, technology, art, morality, autonomy, self-consciousness, self-creation, the capacity for suicide and the ability to lie; each of these rely on a wellrehearsed set of dualisms: e.g., appearance/reality, nature/culture, matter/spirit, subject/object, private/public, savage/civilized. According to Michael Landmann, the first use of the term *philosophical anthropology* dates to Otto Cassmann's *Anthropology* (1596), where he proposed a doctrina geminae naturae humanae, or a theory of the "psychophysical dual nature of humanity." Philosophical anthropology thus presumes other, non-philosophical types of anthropology. By the late eighteenth century a tradition of biological anthropology emerges with Blumenbach and others; excited by discoveries of non-human hominid fossils, this later led to a scientific anthropology organized around concepts of race, physiognomy, and comparative ethnology. In this way, philosophical anthropologies assume certain regularities of human behavior that explain the difference that makes a difference between human and nonhuman animals.³⁷

³⁷ M. Landmann, *Philosophical Anthropology*, D. Parent, trans. (Philadelphia,1974), 17; A. Cunningham and N. Jardine, eds. *Romanticism and the Sciences* (Cambridge, 1990), chs. 8 and 12; D. Lindenfeld, *The Practical Imagination* (Chicago, 1997), 296-304.

A philosophical anthropology thus assumes a philosophy of history and prehistory. By articulating the narrative arc of human history, anthropological theory circumscribes human development so that the ends of human culture are determined from the start. Pre-history is to history only insofar as a temporal and conceptual limit is determined in advance to mark the limits of the *human* with a developmental narrative. While such ideas are undoubtedly present in ancient civilizations, the specifically modern origins of anthropology are rooted in the colonialism of Western Enlightenments. To theorize the seemingly endless diversity of human cultures, Western intellectuals began by comparing indigenous groups with their own groupings. Moving from what was for them the obvious end point of human social evolution, early anthropological theorists developed with a concept of *primitive* for the earliest stage of development. Prior to the nineteenth century, moreover, *primitive* was also rapidly linked to the concept of savage, both of which denoted a pure, uncorrupt (e.g., the "noble savage" of Rousseau) rather than a negative or pejorative state. From this a more robust concept of *primitivism* emerged to frame narratives of human social evolution and of the development of the concept civilization. Associated with a common right to land, low levels of social stratification, low population densities, and a relative abundance of food resources, primitivism is also frequently associated with some type of "golden age" (e.g., the Garden of Eden) full of innocence and abundance. Accordingly, "primitive" peoples are often figured as living "closer" to nature, and so more closely imitate or follow natural law in a pure, uncorrupt way. In this way, the philosophical concern with primitivism becomes involved with the narrative-theoretic expression of natural law.³⁸

³⁸ W. Adams, *Philosophical Roots of Anthropology*, (Stanford, 1998), 75-78; see also M. Bell, *Primitivism* (London:, 1972); for an example of modern primitivism, see J.J. Rousseau, *Discourse on the Origins of*

Recent anthropologists such as Stanley Diamond and Marshall Sahlins are notable for attempts to develop the conceptual bases of primitivism. For anthropology in general - and philosophical anthropology in particular - the most significant aspect of Marx and the Marxian tradition is to make primitivism theoretically respectable. With Marx, however, the primitive was often discussed in terms of the primitive mode of production that corresponded to the prehistoric era. Throughout this inquiry I interrogate precisely this narrative, and argue the political theory is fundamentally a narrative genre. Political theory, in other words, requires storytelling. Aristotle's sociodicy, for example, illustrates how theorizing humans as animals who by nature live in political association functions both as the conceptual means around which such narratives are elaborated, as well as the normative ends toward which it is aimed. From its Islamic transmission to the medieval scholastics to its transformations in Christian theology and Roman law, the basic narrative tracing the development from natural man to political animal has remained largely unchanged. By the early modern period, the so-called "state of nature" was the theoretical fiction of choice for intellectuals of various stripes and orientations. Between nature and culture, primitive humanity was endowed with innocence and purity like that found in the Garden of Eden before the Fall of Man.³⁹

At work within these philosophies of history and anthropology are several theoretical and historiographical elements. First, human societies develop with innate, inevitable cultural progress; human history, it is thought, follows a continuous, necessary and orderly course that continuously improves the human condition. Second, there is a

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Inequality in The Basic Political Writings, D. Cress, trans. (Indianapolis, 1987), 38-39.

³⁹ Adams, *The Philosophical Roots of Anthropology*, 108; S. Diamond, *Primitive Views of the World* (New York: 1969); S. Diamond, *In Search of the Primitive* (New Brunswick: 1974); M. Sahlins *Stone Age Economics* (Chicago: 1972).

general acceptance and presupposition of norms linked to human culture as taming, mastering and civilizing of nature. Furthermore, three theoretical tools become central to philosophical anthropology: conjectural prehistory, evolutionary stage theory, and the comparative method. Conjectural prehistories are stories, narratives and hypotheses about how the animal-man became fully human, simultaneously accounting for the transition from nature to culture, and the development from prehistory to history. If conjectural prehistory concerns the humanization of man, this process occurs through developmental stages including actual and hypothetical knowledge of the past, an evaluative description of the present, and a trajectory of progress for the future.⁴⁰

In this project I distinguish between *developmental narratives* and *narratives of development*. Developmental narratives, that is, track the transition from nature to culture, animal to human, with historical progress figured as natural and teleological. The arc of such narratives follows the progressive humanization of the animal *H. sapien*, and the domestication of animal instincts repressed by society; within developmental narratives, domestication is figured as taming, breaking and making docile the animal instincts of humanity. By contrast, narratives of development are political and economic in character, and trace the history of societies from subsistence to surplus, from barbarism to civilization, with progress the consequence of specific forms of economic relations and social values; their narrative arc concerns the progressive enculturation of humanity from savagery and barbarism to civilization and politics. Its norms construe the domesticated as civilized, and the state as necessary to govern human nature.

From hunting and gathering to agriculture and pastoralism, the evolutionary stages of subsistence track the developmental stages of sovereignty: from men and

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⁴⁰ Adams, The Philosophical Roots of Anthropology, 9-11, 29-38.

women and the nuclear family to villages, towns, cities and states, these stages also correspond to the "stages of man," each marked by respective technical developments of stone, bronze and iron. While this relation between subsistence and sovereignty was first proposed by Dicaerchus in the fourth century B.C., it lay dormant until the eighteenth century when Jacques Turgot revived the model as the basis of liberal economic theory. According to Ronald Meek, progress in this "stadial theory of history" is defined by the rational scale and efficiency of labor that releases increasing numbers of agricultural workers to labor in non-agricultural sectors. In this sense, the arc of history bends toward private property, market economics and individual freedom.⁴¹

The narratives I am concerned with in this project figure the origin, development and spread of Western freedoms as the progressive enlightenment of humanity. Within this narrative democracy is the central political end, and liberal forms of government are its central means. The most effective form of economic organization is free market capitalism. According to these narratives, by recognizing each person as a unique, rights bearing entity, liberal political institutions are the cultural nurseries for liberal economic individuals. Over the last century, then, freedom has become synonymous with democracy as a form of political organization, and with capitalism as the complimentary and most favorable form of economic organization. To be free is to be free to vote for democratic representation and to own private property and to labor within the social relations of capitalism. The increasingly integrated global capitalist market has become both a criterion for and a consequence of the spread of Western values of freedom and

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⁴¹ Passages from Dicaerchus survive only in the later texts of Porphyry and Varro, for which see A. Lovejoy and G. Boas, *Primitivism and Related Ideas in Antiquity* (Baltimore, 1935), 368; on Turgot, see R. Meek, ed. and trans., *Turgot on Progress, Sociology, and Economics* (Cambridge, 1973), 10.

democracy, and the spread of free market capitalism the only means by which true and meaningful freedom can be spread throughout the world.⁴²

Despite never offering a comprehensive theory of slavery, the materialist philosophy of history offered by Marx and Engels figures it as one of the five stages of development toward socialism. From ancient slavery to medieval feudalism to modern capitalism, the *mode of production* concept is conceived of as supplying the theoretical framework for discussing the social relations specific to different forms of surplus extraction. The mode of production based on enslavement of labor turned on making direct property of human beings as the principle means of extraction; the feudal mode depended on extracting surplus through a complex juridical-political state apparatus; and the capitalist mode of requires the direct, private ownership of the means of production. By way of these stages Marx famously argued "the hand-mill gives you society with a feudal lord; the steam-mill, society with the industrial capitalist." Later Marxists divide the mode of production concept between the forces of production and the relations of production. Whereas the former concern aspects such as the quality and availability of land, the level of technological development and knowledge, and the availability of machinery, the latter concern relations between producers and appropriators (i.e., classes), and the means of surplus extraction (i.e., property relations). According to David Graeber, however, not only is the concept under-theorized by Marx and the Marxian tradition, with Wallerstein and "world systems theory" the concept completely collapsed, evacuated of any critical coherence. Wallterstein's three world-systems – mini-systems, world-empires, and world-systems – as well as Karl Polanyi's prior distinction between

⁴² D. Harvey, *A Brief History of Neoliberalism* (Oxford, 2009), 32; see also J. Schumpeter, *Capitalism, Socialism, and Democracy* (New York, 2012).

three modes of distribution – reciprocity (mini-systems), redistribution (world-empires), and the market (world-systems) – destabilized the concept by shifting the emphasis from production to distribution, and by changing the unit of analysis from "social formations" to "world systems".⁴³

These changes to key narrative concepts disrupted the historical specificity of slavery, feudalism and capitalism, with embryonic forms of capitalism now appearing everywhere. Jonathan Freidman, for example, finds many of the key traits of modern capitalism in Greek and Roman slavery; Kajsa Eckholm, Andre Gunder Frank and others argue for a capitalist world system a full five thousand years old. As Graeber observes, without the *mode of production* concept as the theoretical and historiographical frame, capitalism suddenly appears as old as human history, a nascent aspect of human nature. Long popular with capitalists and their ideological supporters, now even Marxists are naturalizing capitalism through their naïve identification of it with urbanism, thus linking the origins of capitalism to practices as old as human culture; Adam Smith, for example, identifies the natural inclination to "truck, barter, and trade." Against the naturalization of capitalism, Ellen Meiksins Wood argues for a return to a central emphasis of Marx, namely, that capitalism began in the country, not the city, and very late in history.⁴⁴

At the center of the debate between is the distinct paucity of free markets in early civilizations. While formalists like Wallerstein argue laws of supply and demand

⁴³ E. Wolf, *Europe and the People Without History* (Berkeley, 1982), 75; K. Wittfogel, "The ruling bureaucracy of Oriental despotism," *Review of Politics* (1953): 15; K. Marx, *Capital, Vol. 1*, B. Fowkes, trans. (New York, 1977), 915-16; K. Marx, *The Poverty of Philosophy* (1847), 91; Marx, *Capital*, 452; I. Wallerstein, *The Essential Wallerstein* (New York, 2000); K. Polanyi, *The Great Transformation* (New York, 1944).

⁴⁴ J. Freidman, "Concretizing the continuity argument in global systems analysis," in *World System History*, R. Denemark, J. Friedman, B. Gills, G. Modelski, eds. (London, 2000), 152; K. Eckholm and J. Friedman, "Capital' Imperialism and Exploitation in Ancient World-Systems," *Review* 4 (1982): 87-109; A.G. Frank, "Transitional Ideological Modes," *Critique of Anthropology* 11 (1991): 171-188; Wood, *The Origins of Capitalism*, 95.

determine the course of social development, substantivists such as Polanyi embed the economy within society as a unique set of social relations, beginning with the reciprocal gift exchange of hunters and gatherers. Yet, as Graeber points out, the origins of this conceptual debate turn on a very naïve form of materialism that is in fact "a perverse form of idealism." By making the production of material things like food, cloth or gold a lesser, more worldly activity than law, music or social theory, this form of materialism is actually an idealism wherein religion and finance are coded as "higher" than textile manufacture and agriculture.⁴⁵

But they are not, of course; the activities of lawyers and poets are just as "material" as the activities of farmers and cooks. Self-identical objects are forever and only processes of action, always motivated by meanings (ideas), and always proceed through a concrete medium (things). And so while all systems of domination ostensibly say 'no, this is not true: there really is a pure domain of law, truth, grace, theory or capital, that floats above it all,' Graber rightly concludes that such a claim is, "to use an appropriately earthy metaphor, bullshit." In this sense, to reconstruct the *mode of production* concept necessarily involves incorporating not only how people cooperate and compete over material surplus, but involves the mutually-fashioning social production of human beings through the education and satisfaction of desire as well.

An appropriately framed materialism, therefore, does not privilege some "material sphere" over an ideal one, but begins by recognizing no such sphere exists. Rather than focus on the production of objects – discrete, self-identical things to own – it begins the more difficult task of understanding the equally material processes by which people create themselves and one another. Drawing from feminist social science, this type of

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⁴⁵ D. Graeber, "Turning Modes of Production Inside Out" in *Possibilities* (Oakland, 2007), 88-91.

inquiry is concerned above all with the endless labors of care, maintenance and education that sustain social groups over time. These labors are often and overwhelmingly the work of women, of course, but this shifts the register of social values to the production of people always already implicated in a process of transformation. As Graeber notes:

families are created, grow, and break apart; people are born, mature, reproduce, grow old, and die. They are constantly being socialized, trained, educated, mentored towards new roles (a process which is not limited to childhood, but lasts until death). They are constantly being attended to and cared for. This is what human life is mainly about, what most people have always spent most of their time worrying about, what our passions, obsessions, loves, and intrigues tend to center on, what great novelists and playwrights become famous for describing, what poetry and myth struggle to come to terms with, but which most economic and politically theory essentially makes to disappear.

The symbolic hierarchy between "high" and "low" culture does not derive from any preexisting symbolic system, then, but is continually constructed and reconstructed in the course of everyday human life. Accordingly, my analysis involves accounting for the relationships intersecting the production of material things to the reproduction of social life within particular biosocial orders – that is, the intersection of *political economy* and *social ecology*. With the *mode of production* concept deployed as my central critical foil, in other words, my account aims to situate the interdependent, co-constitutive processes by which human subjectivities and social consciousness are created in the course of everyday shared life.⁴⁶

In this project, I approach both political theory and historiographical practice as modes of writing rather than modes of being, as something within history rather than as something outside history. My primary thesis is that freedom and enslavement are constitutive both theoretically and historically. In this sense, not only are concepts always practical, they are already political as well. If this appears to involve a question-begging circularity, it remains a burden of the narrative that follows to articulate how the nature of the seeming circularity is, on closer inspection, a dialectical development.⁴⁷

Formally, any decision about what is political is not in itself a political decision. Any decision *about* the political, in other words, is a decision based on knowledge since either it must be expressed within a particular body of knowledge or legitimized from a point of view that will render the distinction clear and consequential. To be quite schematic, it is not implausible to argue that all knowledge involves distinctions of similarity and difference, and knowledge-production by such differentiation is a political activity. To produce knowledge in the first place, any given fragment of knowledge must be demarcated from that which is external to it – that is, from what is *not* knowledge. To reproduce knowledge, moreover, requires internal differentiation. In this way, knowledge production inevitably involves a series of decisions the consequences of which are ontological, ethical, and historical. Political insofar as it differentiates, knowledge production is inexorably imbricated with history. Yet, knowledge production is at once

⁴⁶ Graeber, "Turning Modes of Production Inside Out," 95-96, 98-100; for more, see E. Smith, "Human Behavioral Ecology: I," *Evolutionary Anthropology* 1 (1992): 20-25; E. Smith, "Human Behavioral Ecology: II," *Evolutionary Anthropology* 1 (1992): 50-55.

⁴⁷ P. Ricoeur, *Time and Narrative*, vol. 3 (Chicago, 1988), 241.

incapable of autonomous differentiation, for there are innumerable varieties of objects, subjects and concepts dispersed over epistemic ecologies and distributed across epistemic topographies. And it is precisely here that philosophizing must encounter history and engage the contingent, empirical mass of the world as the totality of all that is the case. In this regard, neither freedom nor enslavement exist in a predetermined and internal relation to knowledge production, nor in an indeterminate and external relation to knowledge production. Rather, the relationships of freedom and enslavement are at once underdetermined *and* overdetermined, and yet are at once historically-open to as a potentially theoretically-productive circuit.

My aim in this project is to provide a genealogy of freedom and enslavement through the relationships to the conditions of conceptual possibility on the one hand, and through their intersections with food and agriculture as contingently necessary material practices for maintaining human forms of social life on the other. Despite attempting to weave these relationships and intersections into a continuous, intelligible narrative, throughout I nevertheless argue such relationships and intersections are materially contingent and theoretically unstable – that is, open to reconstruction by way of a politically-oriented and historically-sensitive praxis for the present. I aim to provide an effective history of the relationships of freedom and enslavement through a genealogy of the intersections of food and agriculture. My analysis does not pretend to offer a "deeper" or "truer" reading of texts or historical episodes, but weaves together the warp and woof of history and theory into a narrative at the horizon of past, present and future. ⁴⁸

⁴⁸ Bartelson, Genealogy of Sovereignty, 8-9.

CHAPTER I

DOMINATION AND DOMESTICATION

Long before the domestication of plants and animals, humans were domesticated by a set of synthetic adaptations at the intersection of nature and culture. Between food and sex, work and death, the social relations of domination among humans began as men and women gathered around the earliest cooking fires. With the hearth as a central site and symbol of domesticity, the asymmetry of sexual relations in the human household marks the first waypoint in the development of human sociality. In fact, the prehistoric mastery of women by men is the basis from which all later forms of enslavement develop. While many scholars recognize women as the first slaves in history, few elaborate its full implications. Gerda Lerner, Sandra Hrdy and Orlando Patterson have gone some way to redressing this occlusion; Patterson notes, for example, that "it was women who first lived in terror of enslavement, and hence it was women who first came to value its absence." Locating the origins of male domination in prehistory, these scholars challenge traditional views of the relationship between social stratification and patriarchy associated with Engels and his Marxian progeny. Instead of patriarchy and inequality emerging only after the state and stratification, private property and the state are unintelligible without the prior reification and appropriation of the female body in its reproductive capacities.¹

In this chapter I trace the ideological basis of enslavement through the emergence of patriarchy, a social order in which masculine domination is the source for all relations.

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¹ Patterson, *Freedom, vol. 1, 51*; Patterson, *Slavery and Social Death, 6, 10, 94, 109-110*; Aaby, "Engels and Women," *Critique of Anthropology 3:9-10 (1977): 25-53*; G. Lerner, *The Creation of Patriarchy, 63*; R. Adams, *The Evolution of Urban Society (Chicago, 1966), 96-97*.

Beginning with the coalescence of gender ideology in the Paleolithic, I trace how these early conditions are expanded to legitimate a patriarchal social order in which women are resources to be owned and controlled for various ends. In the first section I examine the importance of meat and fire for human evolution, paying special attention to the biosocial effects of cooking. In the second section I analyze the sexual division of labor associated with foraging, tracing how the social ecology of foraging involved a symbolic framework in which prestige was attained by a separation and control of the wild. In the third section I turn to the relationship of patriarchy to the origins of enslavement. In the fourth section I analyze the how the power of the masculine order turns on its lack of need for explicit justification. Patriarchy is an androcentric vision inserted as objectively neutral, thus dispensing with the necessity of articulating a discourse of legitimation.

Inextricably linked to this discourse, the normalization and institutionalization of enslavement created a new class of psychologically enslaved people. Closer attention to prehistoric realities casts doubt on certain claims of sociobiologists. I argue that, while post-Neolithic practices and ideologies of enslavement are grounded in specifically human characteristics, there is nothing "natural" or inevitable about these ideological constructs. Rather, I argue patriarchy is an artifact contingent on biologic necessity that became and remains an institution of human culture enforced and maintained over time by ideas, habits and practices.

Meat and Fire

Contemporary evolutionary models trace modern humanity from two transitions. Both in the family *Hominidae*, the first transition is generic, from *Australopithecus* to the genus

Homo. Mammals ordered with primates, australopithecines were roughly the size of chimpanzees, with slightly larger brains, and lived an arboreal life on a largely vegetal diet. Some two and a half million years ago, however, several sharp shards of Ethiopian rock point to a decisive adaptation; found amid bones with deep incisions and cleanly-cut tendons, these stones tell the story of early hominids learning to harvest the flesh of large animals with rudimentary tools. A few hundred thousand years later – or 2.3 million years ago – a new species appears: Homo habilis. Known as habilines, only six skulls and two complete specimens have been recovered of this crucial missing link in hominid evolution. Though much remains unknown about habilines, with brains twice as large and clear evidence for the fabrication and use of tools, sufficient differences warrant a new genus altogether.²

By contrast, the second transition is specific, from early forms of *Homo habilis* to the fully-erect figure of *Homo erectus*. According to Richard Wrangham, despite a lower forehead and smaller brain than modern humans, *H. erectus* nevertheless marks the "genesis of our physical form," displaying simultaneously the largest increase in body size and the largest decrease in tooth size in the last six million years of human evolution. Absent are adaptations for life in the trees; present is a cranium 42 percent bigger than before. With a narrower rib cage and pelvis – indicating a smaller intestinal tract – *H. erectus* is the first hominid to walk out of Africa, traversing the Levantine corridor 1.7 million years ago. By contrast, *H. sapiens* left some 400,000 years later, first traveling to the Near East about 70,000 years ago, to South Asia 20,000 years later, and then to the first place *H. erectus* had never been – Australia – only 40,000 years ago. At the same

² For two original reports, see R. Dart, "Australopithecus africanus: the Man-Ape of South Africa," Nature 115 (1925): 195-199; J. Robinson, "Homo 'habilis' and the Australopithecines," Nature 205 (1965): 1-10; for the full story, see M. Landau, Narratives of Human Evolution (New Haven, 1991), ch. 6., es 161-174.

time, *H. sapiens* arrived in Europe, and only 10,000 years later were settled in East Asia. When and how the species entered the Western hemisphere remains disputed, with estimates ranging anywhere from 100,000 to 14,000 years ago.³

Given the profound implications of each transition, two distinct explanations were seemingly needed: the first to account for the emergence of hominids, the second for the speciation associated with anatomical modernity. For the last half century many versions of the so-called "hunting hypothesis" have been used to explain the first. According to Sherwood Washburn, the incorporation of meat using found tools like sticks and rocks facilitated a regular incorporation of complex carbohydrates, proteins and starches from animal flesh into early hominid diets; in turn, this allowed transitional populations to grow larger, stronger bodies and bigger brains – that all-expensive organ whose energy requirements expand exponentially with size. The benefits of this dietary shift also encouraged long-distance migration and increased social cooperation.

To explain the second transition, Wrangham recently advanced the "cooking hypothesis." For Wrangham, while meat accounts for initiating the transition from "chimpanzee-like australopithecines into knife-wielding, bigger-brained habilines," their "apelike bodies" were limited to collecting and digesting vegetal foods as efficiently as australopithecines. By contrast, physiological differences between *H. habilis* and *H. erectus* point to a profound dietary shift: as the body and brain of *H. erectus* increased rapidly, intestinal length and tooth size decreased proportionally. Wrangham estimates fully forty-two percent of each day would be needed for *H. erectus* to chew enough raw

³ Previously dated hundreds of thousands of years apart, very recent discoveries indicate *H. habilis* and a smaller, nascent form of *H. erectus* cohabitated in Africa for a half million years, likely interbreeding; F. Spoor, M. Leakey, *et al.*, "Implications of new early *Homo* fossils from Ileret, east of Lake Turkana, Kenya," *Nature* 448:9 (2007): 688-691; Wrangham, *Catching Fire*, 138; Ofek, *Second Nature*, 167.

vegetable matter to meet its basic metabolic needs, with cooking reducing this by as much as a fifth for the same caloric intake. As the gut shrank, then, the brain grew, making humans adapted to cooked food...

...in the same essential way as cows are adapted to eating grass, or fleas to sucking blood, or any other animal to its signature diet. We are tied to our adapted diet of cooked food, and the results pervade our lives, from our bodies to our minds. We humans are the cooking apes, the creatures of the flame.

Precisely because organisms are highly adapted to their diets, anatomical adaptations are driven more often by subsistence needs in the present rather than prior physiological traits; because cooking generally increases the available energy in food, gelatinizing starches and proteins for more efficient digestion, its function as a type of "pre-digestion" forms the critical synthetic adaptation from which humanity evolved.⁴

Humans are thus a species created at the intersection of diet and technology, omnivory and fire. In fact, not only are humans alone among primates with a robust commitment to carnivory, they are the only extant primates known to eat other large animals regularly. Before two million years ago, moreover, there is no evidence for fire. The earliest evidence for human fire use dates to 790,000 years ago, where at a site known as Gesher Benot Ya'aqov olives, barley and grapes are found among burnt seeds, pieces of flint, bones and axes, while an ancient fire pit in England dates securely to 400,000 years ago. Beginning around 250,000 years ago, a plethora of evidence for the use and control of fire by Neanderthals and *H. sapiens* emerges. While this raises a host

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⁴ S. Washburn and C. Lancaster, "The Evolution of Hunting," in *Man the Hunter*, R. Lee and I. DeVore, eds. (Cambridge, 1968), 293-303; Wrangham, *Catching Fire*, 89; D. Harris, "Human Diet and Subsistence," in *The Cambridge Encyclopedia of Human Evolution*, S. Jones, R. Martin, and D. Pilbeam, eds. (Cambridge, 1992), 69.

of issues, the central upshot is how both explanations involve two distinct factors, namely, a new energy-rich food source in animal proteins, and the means for their regular incorporation with basic tools. In this sense, human natural history begins at the intersection of food and technology as a relational, synthetic adaptation between food and behavior. Long before the "expensive-tissue" hypothesis, in fact, paleoarchaeological data traced the onset of encephalization and the origins of hunting and gathering to the same time, place, and ancestor: 1.8 million years ago in east Africa with *H. erectus*. Because the probability of preservation over time is low, the frequency of an artifact or practice must be relatively high to leave a trace in the material record; thus, the use of fire clearly antedates both transitions in human evolutionary history. With smaller digestive tracts, bigger brains and stronger bodies, humans gained a more diverse diet, a longer lifespan and new forms of social experience. By reducing the time needed to eat and digest food, cooking freed up a sizeable part of the day for other pursuits, as fire extended light into night, providing a focal point for eating and socializing. Cooking not only requires time, memory and preparation at an individual level, it requires social knowledge about seasonal availability, location, edibility and pharmacology.⁵

⁵ N. Goren-Inbar, N. Alperson, M. Kislev, et. al., "Evidence of Hominin Control of Fire at Gesher Benot Ya 'aqov, Israel," Science 30 (April 2004): 304: 5671: 725-727; L. Aiello and Wheeler, "The Expensive-Tissue Hypothesis," Current Anthropology 36 (1995): 199-221; K. Milton, "Primate Diets and Gut Morphology," in Food and Evolution, M. Harris and E. Boss, eds. (Philadelphia, 1987), 96-116; D. Chivers, "Diets and Guts," in The Cambridge Encyclopedia of Human Evolution, S. Jones, R. Martin, and D. Pilbeam, eds. (Cambridge, 1992), 60; J. Morris and Q. Rogers, "Nutritionally Related Metabolic Adaptations of Carnivores and Ruminants," in Plant, Animal and Microbial Adaptations to Terrestrial Environments, N. Margaria, M. Arianoutsou-Garaggitaki, and R. Reiter, eds. (New York, 1983), 165-180; W. Hamilton and C. Busse, "Primate Carnivory and Its Significance to Human Diets," Bioscience 28 (1978): 761-766; D. Isaac and D. Crader, "To What Extent Were Early Hominids Carnivorous?," in Omnivorous Primates, R. Harding and G. Teleki, eds. (New York, 1981), 37-103; R. Leakey and R. Lewin, Origins Reconsidered (New York, 1993), 167; W. Durham, "Toward a Coevolutionary View of Human Biology and Culture," in *The Sociobiology Debate*, A. Caplan, ed. (New York, 1978), 428-448; R. Kay, "On the Use of Anatomical Features to Infer Foraging Behavior in Extinct Primates," in Adaptation for Foraging in Nonhuman Primates, J. Cant and Rodman, eds. (New York, 1984), 38; B. Winterhalder, "The Analysis of Hunter-Gatherer Diets," in Food and Evolution, 316.

Importantly, then, by bringing food to a central location to prepare, share and consume, cooking separates procurement from consumption, thus transforming the act of eating from solitary and opportunistic to social and deliberate. As humans learned to control this first renewable resource, the social life of the species was increasingly organized around fire. Yet cooking was also time-consuming and conspicuous, offering new opportunities for cooperation and competition. The sights and smells of cooking undoubtedly raised the visual and olfactory profiles of early cooks, attracting the hungry or lonely by sight and smell; the resources stored around the fire provided new threats, leaving those by its warm glow vulnerable to brigands and beasts alike. Around the need to maintain the cooking fire and protect its cook, then, a new social space emerged in the form of the hearth; now in need of one another, men and women gather at the end of organismal autarky around the human household and its pre-existing economy of need. Cooking inaugurated a form of biosocial cooperation as the basis of human natural history, from which men and women each developed a more comprehensive need for the other. Human speciation is marked by a new level of mutual reciprocity, a new level of interdependence, for only in pairs was the "cooking ape" able to survive sexually and thrive socially.

According to Washburn, as meat became an important part of early hominid diets, if it was not scavenged it was typically easier for males to obtain. Males with surplus meat offered it to females, who in turn provided a variety of foraged foods, from which the incipient household emerged. On this view, domesticity evolved through an exchange of resources subordinated to sexual reproduction; sex is the organizing principle of social life, while economic factors (e.g. subsistence) are secondary. For protection and food, in

short, females provide paternity assurance to males. Similarly, for Wrangham, men ensure food gathered by women will not be taken by others, while women ensure men "will have an evening meal." With sexual dimorphism more pronounced in early hominids, males were the primary beneficiaries of this new arrangement, as females were significantly smaller and so more vulnerable to male power. In all likelihood, he continues, this "simple marriage system" solidified pre-existing habits to create a "primitive protection racket" wherein "males cooperated to protect females from robbery and rape in exchange for cooking the daily food." The other benefits of the new human pair-bond – male provisioning, increased efficiency, social networks for child-rearing, etc. – were thus contingent on a more basic need to protect women cooking. Rather than sex, then, the exchange of food within reproductive pairs becomes the organizing principle of human sociality. The true upshot of the cooking hypothesis, in other words, turns on recognizing the human pair bond as a biosocial ritual governed by the social need to restrict access to its two key resources: food and sex. Humans are thus a species for which access to food is more highly regulated than access to sex; in fact, not only is the human mating system adapted to its feeding system, sexual access itself is a function of the organization of subsistence and is constrained by social adaptations to the food supply. As with every other species, then, food is the primary condition for sexual access among humans, and the basic relations of human domesticity are a consequence of social adaptations to the food supply rather than sexual access to females.⁶

For ethologists, such behaviors are tied to resource allocation between competing males over sexual access to females, for, again, food-sharing norms are often adaptations related to overall food competition; in fact, the many instances in which sexual systems

⁶ Washburn and Lancaster, "The Evolution of Hunting," 293-303; Wrangham, Catching Fire, 131-155.

are adapted to food systems strongly suggests that reproduction is constrained by the ways organisms are socially adapted to their food supply. This new order was not merely the result of a general normative attitude; the fact that modern human bodies and brains evolved in an ecological context of high-glucose cooked foods strongly suggests "the cultural rules that specify how women's and men's food are to be shared are adapted to the society's need to regulate competition specifically over food." Katharine Milton argues this division of labor was "the pivotal adaptation in human evolution," enabling humans to access foods from two trophic levels (the position of an organism in a given food chain or, what it eats and what eats it) simultaneously, creating "a foraging strategy that appears to be truly unique among mammals." On this perspective, perhaps the most important hominid innovation was to replace this linear strategy with a radial one organized around a central location some two million years ago. As meat is increasingly incorporated into the diet of early hominids, the mechanisms facilitating this division of labor intensified as specializations developed sexually. Just as with fire and cooking, then, the co-feeding and food-sharing norms characteristic of the human sexual division of labor *antedate* hominid speciation, and form the "fundamental platform of human behavior," the "true watershed between ape and man." Separating the acquisition, preparation and consumption of food involved in hunting and gathering thus forms the socio-economic platform for all hominid behavior.⁷

⁷ K. Hill and H. Kaplan, "On Why Male Foragers Hunt and Share Food," *Current Anthropology* 34 (1994): 701-706; T. Clutton-Brock, "Some Aspects of Intraspecific Variation in Feeding and Ranging Behavior in Primates," in *Primate Ecology*, T. Clutton-Brock, ed. (London, 1977), 55; A. Parish, "Sex and Food Control in the Uncommon Chimpanzee," *Ethology and Sociobiology* 15:3 (1993): 157-179; L. Paul and L. Hirsch, "Human Male Mating Strategies II," *Ethology and Sociobiology* 17 (1996): 71-86; W. Hamilton, "Omnivorous Primate Diets and Human Over-consumption of Meat," in *Food and Evolution*, 122; R. Bleier, *Science and Gender* (55): 664-688; K. Milton, "Primate Diets and Gut Morphology," in *Food and Evolution*, 108; C. and J. Lancaster, "Parental Involvement: Hominid Adaptation," in *How Humans Adapt*, D. Ortner, ed. (Washington, 1983), 33-56.

In these two evolutionary transitions, then, are two biosocial hypotheses of human speciation. Between meat and fire, in other words, key questions of human nature turn around distinctions between biology and sociology, behavior and technology. With fire, Darwin notes, humanity "tamed Nature itself," extending the day for work and play and creating the sexual division of labor central to human social life. Cooked food, that is, embodies how biology is always cultural and culture is already biological. Cooking not only facilitated a rapidly expanding brain, it was facilitated by it as well; in this sense, cooking inaugurates a new mediation between heaven and earth, life and death, nature and society. "Cooking establishes the difference between animals and people," Claude Lévi-Strauss argues, for not only does it "mark the transition from nature to culture, but through it and by means of it, the human state can be defined with all its attributes." It is with cooking that humanity and animality join in the contingent necessities of life and the inevitable mysteries of death.⁸

Food and Sex

Hominids have thus lived as a distinct evolutionary line for at least three million years, yet only in the last 120,000 years or so did anatomically modern humans appear, long after earlier hominids left Africa for Europe, Africa and Asia. Robert Foley notes key anatomical and behavioral differences between early hominids and modern humans; the former, for example, grew more quickly, had smaller ranges and obtained meat primarily through scavenging. Foley also notes the evolutionary changes that occurred after the appearance of modern humans; upper Paleolithic humans were larger and more sexually

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⁸ C. Darwin, *The Descent of Man, and Selection in Relation to Sex*, in *From So Simple a Beginning*, E. Wilson, ed. (New York, 2006 [1871]), 767; C. Lévi-Strauss, *The Raw and the Cooked: Mythologiques, vol. I, J.* and D. Weightman, trans. (Chicago, 1969 [1964]),164, see also 88, 275, 316.

dimorphic than later, post-Pleistocene humans, for example. Beyond these differences, moreover, the complete replacement of one hominid species by another – e.g., the extinction of Neanderthals some 40,000 years ago in Europe – points to decisive competitive advantages in subsistence strategy. For Foley, however, the upshot is clear: "early hominids were neither human nor hunter-gatherers," nor do extant foragers represent "the basal hominid way of life" as figured by the hunting hypothesis.

Australopithecines and early members of the *Homo* genus were thus not "cultural" in the contemporary sense. Foley concludes "modern hunting-gathering is a largely post-Pleistocene phenomenon. Rather than being an adaptation ancestral to food production, it is a parallel development." In this way, it is doubtful if analogies from extant foragers can be extended back much in time at all.

As early hominids evolved from australopithecines, by contrast, human social life was likely similar to chimpanzees: intimate and individual. Like bonobos, chimpanzees form social coalitions for competition, inter-male rivalry and hunting; with limited conspecific cooperation, they share neither information nor the duties of parenthood, both of which are distinctive of hominid natural history. Unlike nonhuman primates, though, humans take a much longer time to reach peak foraging efficiency – or the age at which they can hunt and gather with the same proficiency as adults – with the work of others sustaining the young and old alike across the life-cycle. In this way, human life is largely possible only because mature foragers provide the surpluses needed to sustain young and old members beyond the range of peak efficiency. Human hunting and gathering is, in other words, a subsistence strategy based on a wide range of cooperative relationships. In

⁹ R. Kelly, *Foraging Spectrum*, 335-336; R. Foley, "Hominids, Humans and Hunter-Gatherers," in *Hunters and Gatherers*, vol. 1, *History, Evolution and Social Change*, T. Ingold, D. Riches, and J. Woodburn, eds. (Oxford, 1988), 215, 220, 219.

this sense, cooperation – and sexual cooperation in particular –functioned as a decisive factor in human evolution. While human infants are more metabolically expensive than great apes – more helpless at birth, dangerous to give birth to, etc. – they are weaned more rapidly, allowing females to breed again. Importantly, while there is a certain temporal exclusivity to the maternal body during gestation, after birth not only can women care for more than one child, their capacity to reproduce at roughly the same level of subsistence is exponential rather than merely arithmetic; regardless of the number of children a woman bears, that is, her basic metabolic needs remain the same. Women thus benefit from social cooperation in ways different from other female primates. ¹⁰

According to Christopher Boehm, there are striking similarities and differences in the sexual divisions of labor between humans and the other primates. Individual male chimpanzees, he claims, are not unlike male hunters, as both live and forage in flexible local kin groups wherein individuals move freely in and out of the group and various subgroups. Both tend to intervene in conflicts, even though foragers often do so as a group, whereas chimpanzees intervene decisively and dominantly as individuals. Humans and chimpanzees display distinct sexual dimorphisms too, with males somewhat larger than females; one physical upshot of this is male domination, which chimpanzees exploit to the extreme.

Yet in other ways they are different. Male foragers tend not to engage in competitive displays aimed at political domination, neither do they live in well-developed dominance hierarchies, as chimps do; access to females and food is not decided regularly by the threat of violence. While chimpanzee communities often travel together, adults

¹⁰ I. Hawkes, "Grandmothers and the evolution of human longevity," *American Journal of Human Biology*, 15:3 (2003): 380-400; S. Hrdy, *Mothers and Others* (Cambridge, 2009), 69; Sterelny, "Life in Interesting Times," 89-91.

and adolescents of both sexes move in and out of the community, joining new sub-groups the size of which are always adjusting to the search for food. Individual chimps move in the community freely, acting to maximize food intake in the face of dispersed resources and typically combat predators on an individual basis. Individual members are regularly bullied, but they are little governed, except when they fight; when the costs of bullying rise beyond the benefits of sociability, individuals withdraw to remain undominated. In fact, sexually available females can easily transfer to proximate groups, while males forever run the risk of being killed at once.¹¹

In this way, the power of dominant male chimpanzees involves an egoistic and aggressive domination rather than a centralized form of authority and governance. If authority is the ability to control the behavior of others with violence or the threat of violence, on the continuum of primate sociality developed by Vehrencamp chimpanzees and other great apes are well on the despotic end. But humans are much more difficult. Acting simultaneously in despotic and egalitarian ways, humans display far more tyranny than any great ape, yet can also be significantly more egalitarian than any bonobo. If dominance is defined in terms of priority to food, sex, status, aggression and skill at social control, there is clearly a marked propensity for humans to compete socially and engage in dominant behavior. Social mechanisms to equalize behavior may be necessary because, as with chimps, underlying dominance and submission tendencies facilitate competition among individuals and constitute a powerful force for hierarchy.¹²

¹¹ Boehm, *Hierarchy in the Forest*, 29-30, 35; 39-40.

¹² On the primate political continuum, see S. Vehrencamp, "A model for the evolution of despotic versus egalitarian societies," *Animal Behavior* 31:3 (1983): 687-682; on the bonobo, see T. Kano, "Male rank order and copulation rate in a unit-group of bonobos at Wamba, Zaire," *Great Ape Societies* (1996): 135; for the species-specific tendencies to status rivalry and dominance behavior, see M. Sahlins, "The social life of monkeys, apes and primitive man," *Human Biology* (1959): 54-73; for an ecological definition of

Raymond Kelly excludes innate dominance dispositions as a cause of inequality. As Boehm notes, however, this simply elides the phenomenology of competition in direct face-to-face contexts typical of gregarious animals such as dogs, chimps and humans. In such a context, it is precisely dispositions to dominance (threat or attack) and submission (appeasement or flight) that are retained by natural selection as adaptive behavioral strategies. Like any other behavioral trait, these reproductively selfish political tendencies are maintained by individual maximization of inclusive fitness; their existence results in direct social and political competition between individuals of the same group, rather than indirect genetic competition between populations. It is here, crucially, that questions of human nature are inextricably linked to the maximization of fitness: there is no original society, no "basal human adaptation" against which dispositions of dominance can be judged as egalitarian or hierarchical. Rather, Boehm concludes, it is likely that modern diversity stems from original diversity in the foraging adaptations of behaviorally modern humans, laying the foundation for regional histories of the world, a plurality of frameworks within which people developed specific cultural solutions to the challenges of increasing population, contact with others and environmental changes.¹³

Although foraging success is shaped by natural environmental contingencies, it is related to social life in important ways. The delayed return on investment with intensive hunting and gathering meant there was almost certainly a cooperative division of labor as soon as foraging was the dominant human subsistence strategy. With delayed-return foraging strategies such as drying, smoking and storing food, sharing was central, and

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dominance, see C. Carpenter, "Sexual behavior of free ranging rhesus monkeys," *Journal of Comparative Psychology* 33:1 (1942): 191.

¹³ Kelly, *Foraging Spectrum*, 330, 343-344; Boehm, *Hierarchy in the Forest*, 40-41; for a critique of domination theory in forager studies, see H. Sharp, "The Power of Weakness," in *Key Issues in Hunter-Gatherer Research*, e. Burch and l. Ellanna, eds., (Oxford, 1994), 35-58.

feasts ensured no hoarding. By contrast, simple hunter-gatherers are immediate-return foragers, or those who share large-game meat with the entire group but do not otherwise engage in significant food storage. As the temporal delay between investment and return expands, the subsistence work of one individual or family does not provide an immediate return and the wider group provides a durable set of social relations through which individual rights to food are protected by long-term social habits. The sexual division of labor among foragers also tends to reduce long-term risks. While women tend to focus on small game and plant resources, this source of calories is nevertheless more reliable than hunting; resources obtained by women are vital to her and her children, as well as her mate. With resources distributed unevenly, specialization among the sexes compliment the many skills needed to survive and thrive. ¹⁴

As a subsistence strategy, then, foraging is neither passive nor opportunistic. In a sense, hunter-gatherers do live "closer" to nature in that their daily experiences are more directly connected to the ebbs and flows of food supply. But for any species – including humans – if resources are over-exploited, the supply diminishes; some individuals starve to death, some are malnourished, and the population is maintained by the available food in a given environment. As with other species, then, forager population densities are rapidly correlated to the carrying capacity of their environment. The key benefit of foraging is its mobility, for if a local food web collapses, all that is required is a change of

¹⁴ B. Skyrms, *The Stag Hunt and the Evolution of Social Structure* (Cambridge, 2003); M. Lombard and L. Phillipson, "Indications of bow and stone-tipped arrow use 64,000 years ago in KwaZulu-Natal, South Africa," *Antiquity* 84 (2010): 635-648; J. Shea, "Neanderthals, competition, and the origins of modern human behavior in the Levant," *Evolutionary Anthropology* 12 (2003): 173-187; J. Shea, "The impact of projectile weaponry on Late Pleistocene hominin evolution," in J.J. Hublin and M. Richards, eds., *The Evolution of Hominid Diets* (Berlin, 2009), 187-198; M. Gurven and K. Hill, "Why do men hunt?," *Current Anthropology* 50:1 (2009): 51-74; K. Hawkes and R. Bird, "Showing off, handicap signaling, and the evolution of men's work," *Evolutionary Anthropology* 11:1 (2002): 58-67; for an evaluation of this debate, see K. Sterelny, *The Evolved Apprentice* (Cambridge, 2012), chs. 4 and 5.

location. But it is precisely this mobility that allows human populations to grow rapidly beyond the carrying capacity of any one area. Conflicts, plagues and social collapse wait for those who fail to migrate, innovate and exchange their way out of scarcities produced by nature and culture.¹⁵

Human hunting and gathering is thus distinctive in separating procurement, preparation and consumption temporally (they occur at different times), technologically (different tools are used for each task), and sexually (foods procured by men are typically prepared by women). This division of labor constitutes the economy of human domesticity, through which the reconciliation of interests and the redistribution of resources occurs. Whereas specialization organizes procurement and production, diversification organizes distribution and consumption; the inevitable tensions of this dynamic are reconciled with redistribution, the primary function of exchange. In this way, by separating procurement and consumption, foraging reduces the "costs" of both. Because most individual humans cannot hunt, gather and cook all the foods required for long-term sustenance, the majority of hunter-gatherer societies reserve food rights as a matter for communal decision, often subordinating individual access to food for the larger social good. Generally, the social organization involved with hunting and gathering societies is relatively egalitarian, structuring daily life in ways beneficial to the group by minimizing the hours per day spent obtaining necessary subsistence. The costs of procurement are reduced through the division of labor and specialization in ranging and

¹⁵ Flannery and Marcus, *Creation of Inequality*, 549; F. Marlowe, "Hunter-gatherers and human evolution," *Evolutionary Anthropology* 14 (2005): 54-67.

foraging, while consumption costs are reduced with a diverse diet of cooked food available in a protected environment. ¹⁶

Importantly, then, two key features distinguish nonhuman forms of foraging from human hunting and gathering, including other primates: men and women obtain *different* foods that are then *shared* within the reproductive pair. That food-sharing is unique to humans is as striking as it is unresolved, for all nonhuman primates live as omnivores in complex social units and yet do not regularly share food. Strictly speaking, then, before using fire to cook early hominids were neither hunter-gatherers nor even fully human. Early hominid subsistence strategies likely resembled other forager species, where individuals gather and hunt, forage and scavenge for their own consumption; neither sharing nor specializing, individuals are food self-sufficient, or at least self-reliant. While they may forage as a group, after maturation individuals procure food under their own auspices and consume it for their own benefit or their offspring. This "feed-on-the-go" method was likely the main strategy in the australopithecine transition, with daily ranging across huge, seasonally-distinct ecologies critical to success.¹⁷

In this sense, the most important aspect of forager social ecology is its primary form of capital. Unlike material capital – e.g., livestock, land or gold – embodied capital is social and consists of long-term relations with family, friends and allies, or special skills, talents or knowledge; while both forms of capital are alienable, the latter is decidedly more difficult to alienate. Knowledge, skills or abilities mitigate the effects of physical domination; skilled workers, after all, are notoriously difficult to coerce.

Because the most vital aspect of forager subsistence is the embodied capital of individual

¹⁶ Ofek, Second Nature, 212, 71; Wrangham, Catching Fire, 163, 135, 171-175.

¹⁷ Hrdy, The Woman that Never Evolved, 8.

band members, the profits of collective action are unavailable to the ambitious for appropriation, for all have an interest in equitable distribution of surplus. Moreover, because foraging economies are based on cooperation and sharing at the level of the band, similar reproductive outcomes tend to prevail for all group members; to the extent variability exists, it is rarely the result of entrenched social differences. As a result foragers rarely keep slaves, for to be efficient from an economic point of view requires them to be mobile, at least semi-autonomous, and armed; in such a context power is no longer direct, and effective supervision expensive, if not impossible. Skills, capacities and health are inalienable, while injury, illness and ageing are inevitable. In this sense, apart from death, embodied capital is more durable than material capital, for land and livestock can always be taken away by contingent factors such as drought or war. Retained through the seasonal swings of fortune, embodied capital remains unaffected by catastrophe or fortune. The distribution of wealth among foraging cultures thus tends to be even, as natural variation is modest and its effects not greatly changeable in the span of a generation, or by the transfer of such difference across generations.¹⁸

In this way, the political economy of foraging tends to organize humans groups in ways that promote cooperation, discourage competition, and create low levels of political inequality and social stratification. Importantly, however, forager egalitarianism applies only to the relations between group leaders, overwhelmingly male heads of household. In fact, according to Kelley, that male hunters so often actively dominate female domestic

P. Seabright, "The Birth of Hierarchy," in *Cooperation and Its Evolution*, 109-110; B. Trigger, *Understanding Early Civilizations* (Cambridge, 2003), 265; S. Bowles, E. Smith and M. Borgerhoff-Mulder, "The Emergence and Persistence of Inequality in Premodern Societies," *Current Anthropology* 51:1 (2010): 7-17; M. Borgerhoff-Mulder, *et al.*, "Pastoralism and Wealth Inequality," *Current Anthropology* 51:1 (2010): 35-49; H. Kaplan, P. Hooper and M. Gurven, "Intergenerational Wealth Transmission and the Dynamics of Inequality in Small-Scale Societies," *Science* 326:5953 (2009): 682-688; Sterelny, "Life in Interesting Times," 96-97.

partners is directly linked to the prestige derived from sharing meat with the entire group. But the degree to which women are dominated by men in forager bands varies widely across continents. Within the group, small egalitarian bands often extend concepts of personal autonomy to women, yet within the family egalitarian relations are much less common. While adult males nearly always comport themselves as equals, egalitarianism extends only to the social group, not the family or kin-based unit. Within the household, male authority is direct, legitimate and relatively unconstrained; women and children alike experience acts of interpersonal domination regularly, thus making all members keenly aware of the dangers of allowing such authority to extend beyond the family. The level of masculine domination varies, then, with the political unit in question. Within the household, the dependency of females for meat – as well as differences in size, skill and strength – make male domination a nearly universal aspect of the species. In foraging bands, by contrast, hunting and warfare appear the key variables for placing men in positions of social dominance. Egalitarian social control is not necessarily based on male domination, then; it is merely one way for a nomadic foraging band to keep any one individual from gaining too much power. Male or female, foragers show a marked propensity to use social control against any adult who begins to assert themselves in an objectionable way. Both sexes participate in the processes by which the bounds of social decency and deviancy are set; beyond these limits, direct social pressures work to sanction individuals with ridicule, punishment and ostracism. While the ultimate sanction is execution, performed almost always by men, women participate fully in ethical life; women exercise a particularly important role in keeping down young ambitious males,

for example. Rather than ecological or economic necessities, then, the egalitarian politics of foragers turns on the creation and maintenance of a set of antihierarchical norms.¹⁹

Beginning with the ubiquitous anthropological assumption that "simple" foraging economies are egalitarian, Bruce Knauft traces how the trajectory of human evolutionary history follows the arc of a U-shaped curve in terms of political hierarchy: beginning with strong degrees of early hominid despotism, it then dips into a protracted curve of forager egalitarianism, only to rise again steeply shortly after the transition to agriculture with the rise of chiefdoms, states and civilizations. In this sense, the riddle turns on explaining how the human species lost its seemingly innate tendencies to hierarchy for millions of years, and then suddenly regain them so dramatically. Provocatively, Boehm argues egalitarianism turns on how women managed and mitigated risk, facilitating an implicit leverage between the sexes precisely because their work is not only necessary, but highly skilled. Ideologies are central to this dynamic, for to "equalize" a political society requires the rank and file to form a moral community, to develop and articulate and practice and enforce a egalitarian ethos, and to deliberately assume responsibility for their own lives. Egalitarianism, in short, is the result of human action and intentionality. In turn, egalitarian politics affects the natural selection of social traits: egoism, nepotism and altruism. In this sense, there is a robust evolutionary basis for altruism: when prehistoric hunter-gatherers became egalitarian, it modified the "balance of power" within natural selection, empowering selection at the between-group level with profound effects.²⁰

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for more, see E. Sober and D. Wilson, Unto Others (Cambridge, 1998).

D. Erdal and A. Whiten, "On Human Egalitarianism," *Current Anthropology* 35:2 (1994): 175-183;
 Boehm, *Hierarchy in the Forest*, 8-9; see also M. Fried, *The Evolution of Political Society* (New York, 1967); on hunter male domination, see R. Lee, *Politics and History in Band Societies* (1982); on calories and prestige, see C. Ember, "Myths about Hunter-Gatherers," *Ethnology* 17:4 (1978): 439-448.
 B. Knauft, "Violence and Sociality in Human Evolution," *Current Anthropology* 32:4 (1991): 391-428;

Work and Death

Paleolithic life was nasty, brutish and short. Under such conditions maturity represented real success, as most of those born inevitably died in the everyday struggle of life. In this dangerous and uncertain world, the actual power of mothers was certainly great: her breast was shelter and sustenance, her care was the difference between life and death. As mothers, women held profound powers of life and death, which at least partly explains the near global uses of the mother-goddess figure to ritualize the dramatic powers of the feminine. This would change in the Neolithic, long after the enslavement of women.

While the human sexual division of labor does indeed appear to begin with biological difference, such differences are not based on strength or endurance but on sexual function and reproductive capacity alone. So while the relationship between reproduction and labor is culturally conditioned by a variety of social factors, it is significant that the earliest sexual divisions of labor entailed women exercising authority, knowledge and competence alongside activities compatible with their requisite maternal functions, and they came to be seen as socially acceptable and natural to both women and men precisely on this basis. While some tasks may have been satisfying or enjoyable, they were also coded as less worthy in their association with women. In this regard, Simone de Beauvoir speculated that the early division of labor from which the inequality of the sexes springs doomed woman to "immanence" – to the pursuit of daily, neverending repetitious toil – while the daring exploits of man led him to "transcendence."

²¹ C. Cipolla, *The Economic History of World Population* (New York, 1962), 85-86; K. Sacks, *Sister Wives* (Urbana, 1982), 67-84; Lerner, *Creation of Patriarchy*, 40-42; Martin and Voorhies, *Female of the Species*, 77-83; E. Friedl, *Women and Men* (New York, 1975), 8, 60-62; S. de Beauvoir, *The Second Sex* (New York, 1973 [1951]); for a contrary view, see M. Harris, "Why Men Dominate Women," *Columbia* (1978): 9-39.

Apart from any dubious philosophy of biology, man-the-hunter has been hunted, though not yet to extinction. Recent work in human behavioral ecology, the sociology of subsistence and feminist anthropology have all undermined its basic tenets. In most hunting and gathering societies, for example, large-game hunting by men is often supplemental, or at least sporadic, while the main food is supplied by women and children gathering and hunting small game. Not only is there sexual complementarity in subsistence work, women have a relatively high social status. Anthropologists have done extensive work on societies in which sexual asymmetry carries no connotation of subordination, and the work of both sexes is regarded as equally significant; while the social roles of men and women differ, that is, social status is equivalent. Highlighting the essential contributions women have made to culture – e.g., basketry, pottery, horticulture – the conjectural prehistory of man-the-hunter is thus revealed as a mechanism that reproduces the social relations of patriarchy.²²

To expand the psychosocial imaginary of prehistoric social life, then, requires refiguring common conceptions of man-the-hunter and woman-the-gatherer. For example, Lerner holds that the key to understanding the transition to modern humanity necessarily begins with that most basic mammalian relation between females and offspring. Nonhuman primates, that is, differ from humans in what Jacques Lacan called the "specific prematurity of our birth," or the extended dependency of the human child. Compared to other mammalian species, humans are born early, with smaller, softer heads to pass through the cervix, all of which are adaptations attendant encephalization and the

²² M. Rosaldo, "The Use and Abuse of Anthropology," *SIGNS* 5:3 (1980), 409-414; L. Lamphere, "Strategies, Cooperation and Conflict in Women Domestic Groups," in *Woman, Culture and Society*, 97-112; Martin and Voorhies, *Female of the Species*, ch. 7; E. Boulding, "Public Nurturance and Man on Horseback," in M. Murray, ed., *Face to Face* (Westport, 1983), 273-291.

pelvic narrowing needed for bipedalism. Naked and utterly helpless, at birth humans cannot even grasp sufficiently for support, needing protection and care from adults for many years. Infant brains develop for two decades or more, exhibiting a plasticity the breadth and depth of which includes a remarkable capacity for learning and behavioral modification. Children are uniquely dependent on mothers for survival, and are decidedly not precocious. Given this function in survival it is not difficult to imagine why men *and* women chose the feminine body and sign as the initial foray into cosmogony; indeed, the earliest Neolithic cave paintings and stone sculptures intimate widespread admiration for the generic maternal figure. In this sense, the infant experience of utter dependency and vulnerability is matched only by the absolute power mothers exercise over the life and survival of children.²³

Elise Boulding develops a robust image of Paleolithic women based on the egalitarian division of labor typical of foragers, with each sex acquiring and exchanging contingent necessities for group survival. Not only does foraging require extensive knowledge of plants, trees, roots and their edible and pharmacological uses, women were the domestic guardians of fire, the inventors of clay and textile technologies used to store surpluses for periods of scarcity. Conjuring secrets of nature, women transformed raw materials into both healing substances and products of careful craft. Clearly, then, the skills of women were as plural and as significant as those of men, and certainly as necessary; female knowledge and competence were at least as great, if not greater. Ritually and socially she was as integral as he, yet even still she must have recognized

²³ J. Lacan, "The Mirror Stage as Formative of the Function of the I as Revealed in Psychoanalytic Experience," *Écrits*, B. Fink, trans., with H. Fink and R. Grigg (New York, 2006), 75-84; Lerner, *Creation of Patriarchy*, 46, 39-40; E. Fisher, *Woman's Creation, Sexual Evolution and the Shaping of Society* (Garden City, 1979), 190, 195.

her *sui generis* powers of life and generativity, feeling herself equal to man and even his superior. From this perspective, female identity formation from very early was rapidly linked to food self-sufficiency and a sense of robust competency in a wide array of life-essential skills. In fact, from the late Paleolithic to the early Neolithic it is clear women *and* men experienced femininity as empowering, or even supernatural, but in any case as necessary, enlivening and beautiful. As Lerner notes, while identity formation is difficult for young women in patriarchal societies, prior to the full institution of its characteristic social relations the onus for ego-formation likely lay on young boys: the fear and awe of women was thus transformed by collective action to identify with men. Hunting in bands led to male bonding, which was only reinforced by war and the need to train warriors; groups that did not develop young men into hunters and warriors might eventually succumb to groups that cultivated such skills actively. Identity formation for males took place in the context of fear, awe and intimidation, thus leading men to create institutions to bolster their egos, strengthen self-confidence and validate their sense of social worth.²⁴

As Lerner recognizes, however, with Freud and de Beauvoir feminists have been especially influenced by theories linking masculine physiology to the psychology of domination. Notable in this regard are arguments linking domestication to masculine domination. Fischer, for example, argues that animal domestication was the model on which men learned about procreation; in particular, arranged or "forcible" breeding of early domesticates is the basis from which rape was first suggested to men. More

²⁴ Lerner, *Creation of Patriarchy*, 45, 55; Childe, *Man Makes Himself* (New York, 1951), 76-80; for a contrasting view, see N. Chodorow, *The Reproduction of Mothering* (Berkeley, 1978); for the classic view, see S. Freud, "Female Sexuality" (1931), in *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, vol. 21 (London, 1964); S. Freud, *Civilization and Its Discontent*, J. Strachey, trans. (New York, 1962); E. Erikson, "Early Development of Female Sexuality," *International Journal of Psycho-Analysis* 8 (1927): 459-472; the various revisionist positions on Freud, see J. Miller, ed., *Psychoanalysis and Women* (New York, 1973).

recently, some suggest male dominance derives from the need to compensate for a lack of ability to give birth with institutions of dominance, a development which scholars like Fischer date to domestication. While surely provocative, not only are such hypotheses grossly monocausal, they are empirically false. Animal domestication in the ancient Near East first began around 8000 B.C., and strong evidence exists for egalitarian societies (e.g. Čatal Hüyük) practicing animal husbandry two thousand years later.

Social production was organized around kinship, and women were subordinated to men through familial relations. Following Lerner, rather than a linear, uniform process, this was a slow accretion of changes at different rates in different regions with different results. For Charles Redman, it occurred as "a series of interacting incremental processes triggered by favorable ecological and cultural conditions and that continued to develop through mutually reinforcing interactions." Because most women devoted the bulk of their adult lives to reproduction and child-rearing, it is also predictable not only that men and women would come to accept this as a necessity, constructing beliefs, mores and values to sustain such practices, but that women would also "choose" or "prefer" certain economic activities easily combined with the maternal role. One of the first powers men instituted was the power to decide which infants should live and which should die – a power that must have been seen by men as a triumph of law over nature, as it went against so much of previous human experience.²⁵

While biosocial conditions may have predisposed men to enslave women before men, both physical and psychic violence were central. Subdued by rape, once pregnant women often became attached to masters psychologically, as fathers of their children.

²⁵ Redman, *Rise of Civilization*, 229; R. Rapp, "The Search for Origins: Unraveling the Threads of Gender Hierarchy," *Critique of Anthropology* 3:9-10 (1977): 5-24.

From this likely derived concubinage as a means for assimilating captive women into the households of captors. Regardless of time or place, using female slaves for labor and sex has been standard, and in its reproductive capacity the female body was the first form of property. With land abundant and tools primitive, there were few opportunities for appropriation; under harsh conditions and given the risks of childbirth, the ability of women to raise offspring beyond dependency was critical to group survival. Groups with a disproportionately large number of women would thus have a decisive advantage, with a higher reproductive capacity. In this way, women were undoubtedly one of the earliest objects of individual and social appropriation, which for men occurs later if only because they did not yet fulfill any significant function of group survival. In war women would be captured and used as property, with scarcity and competition likely facilitating the rise of warrior men with increased abilities to control others.²⁶

In this way, from the beginning slavery has meant something different for men and women, with domination of women providing the conceptual model and the patriarchal household providing the social model. The authority of fathers over children functioned as the ideological basis for domination through dependency. In Mesopotamia, such patriarchal power assumed a variety of guises, but fathers everywhere had the power of life and death over children; not only could he commit infanticide by exposure or abandonment, he could pledge his wife and children as collateral for debt. Because the dependency of children was temporally limited – reaching, in turn, the age of dominance themselves – the relation ultimately proved unsuitable as a model for permanent domination. Despite the expectation of children fulfilling obligations of care to elders,

²⁶ Patterson, *Freedom*, 51; Patterson, *Slavery and Social Death*, 6, 10, 94, 109-110; P. Aaby, "Engels on Women," *Critique of Anthropology* 3:9-10 (1977): 47; R. Adams, *The Evolution of Urban Society* (Chicago, 1966), 96-97.

paternal power was circumscribed by the stages of the life-cycle, as well as by the future power of children. The first model for social relations with an equal who was at once forever unfree, then, was husband and wife. While women had rights and obligations though the protection of kin, by the transition to agriculture female sexuality was already figured as a type of property to exchange in marriage.²⁷

So, while it is likely that the subordination of women developed as a socially acceptable norm over the course of millennia, it is this psychosocial potential for domination that forms the basis from which other forms of domination evolve. Female enslavement is the common ancestor to all later forms of enslavement, in short; prior to agriculture – in situations of mutual interdependence – it is not difficult to imagine why societies chose to segregate certain duties and obligations on a sex-based axis precisely because such forms of deferential social behavior are understood as cyclical, natural and therefore just, with each individual undergoing both subjection and dominance at different stages in the life-cycle. According to Claude Meillassoux, however, after male domination is established, women are perceived in an entirely new way, transformed into an inferior group of humans that in turn facilitates the transfer to such status of other groups in the form of slavery. In this way, the domestic oppression of women was the model from which slavery developed as an institution, providing the embodied analogue, or corporeal metaphor, for the later enslavement of entire groups designated as slaves. for later forms of enslavement.²⁸

²⁷ Patterson, Slavery and Social Death, 199; Lerner, Creation of Patriarchy, 88-89.

²⁸ Patterson, *Slavery and Social Death*, 199, 249-250; Lerner, *Creation of Patriarchy*, 95-99; C. Meillassoux, *The Anthropology of Slavery*, A. Dasnois, trans. (Chicago, 1991 [1986]), 109-113 and "From Reproduction to Production," *Economy and Society* 1 (1972): 93-105.

Artistic depictions of women reinforce this social code by depicting women as closer to nature than men, and thus in greater need of being controlled. Such depictions tie into a general cultural dichotomy between the "wild" and the human, civilizing forces that tame it. According to Hodder, early Neolithic female figurines were part of the culturing or ordering of the female form as part of the general process of controlling the wild and taming the dangerous. Notably, the Venus figurines from Europe between 25,000 and 10,000 years ago do not depict women working, or even individuals with clearly defined facial characteristics; instead, the standard figurine depicts a woman who is featureless save for the enlarged breasts, hips and vulva. But there is nothing "naturally" wild in women, just as there is nothing "naturally" dangerous in men; similarly, neither is death or fire necessarily wild. The wild is not a "natural" category at all; rather, the construction of "wild" as a separate domain was created to explicitly oppose "culture." With the wild categorized as other, prestige could be derived from its control and embellishment, and through this alterity society could be erected. In this way, early in the Paleolithic the objectification of a culture-nature distinction with stone tools and other artifacts allowed the creation of a symbolic order in which the wild was construed in relation the cultural. From this point basic emotions, fears and desires were increasingly deployed to generate social order.²⁹

²⁹ Lerner, *Creation of Patriarchy*, 17; J. Faris, "From Form to Content in the Structural Study of Aesthetic Systems," in D. Washburn, ed. *Structure and Cognition in Art* (Cambridge, 1983); Hodder, *Domestication of Europe*, 287-288; see also. L. Tiger, *Men in Groups* (New York, 1970), ch. 3; M. Sahlins, "The Origins of Society," *Scientific American* 230:48 (1960): 76-87; S. McKinnon, *Neo-Liberal Genetics* (Chicago, 2005), 6-8.

Origin and Order

Like all nonhuman animals, humans aim to preserve themselves, propagate the species and shelter themselves from the elements. Unlike most (if not all) other nonhuman animals, however, humans are adept at constructing tools, transforming the environment, and speculating about the meaning of the world. By creating language and other symbolic systems to such ends, *Homo sapiens* do perhaps have a unique claim amid the dizzying array of earthly life forms. But there is nothing new about this type of philosophical anthropology. From Aristotle to Eric Fromm, from E.O Wilson to Ernst Becker, that humans are half-animal and half-symbolic – at once a worm and food for worms – has resulted in sharply distinguishing humanity from animality, making the human body alien and repugnant in its aching, bleeding and dying.

Traditional norms and narratives of male supremacy have proven remarkably resistant. Following Aristotle, for example, Freud figured the human norm as male; females were deviant, abnormal, lacking a penis and so psychically structured around compensating for this ostensible deficiency. The Freudian "anatomy is destiny" thus resuscitated a range of deep patriarchal fantasies. Throughout the twentieth century disciplines like philosophy, biology and anthropology have in different ways reinforced patriarchy as the natural order, reinscribing in the bodies of men and women a universal contingency as the basis for masculine domination in the present. In fact, from this cluster of concepts derived a new discipline. Led by E.O. Wilson, the aim of sociobiology includes an account of human sexual relations at the confluence of social behavior and natural selection. For Richard Dawkins, behaviors are adaptive insofar as they facilitate group survival, and the results of natural selection are subsequently encoded onto the

human genome – from altruism to attraction to maternal instinct. Under the guise of science, sociobiologists argue that a sexual division of labor wherein women are nurturing care-givers and child-bearers entails an evolutionary advantage that is then transcribed onto the genetic heritage of humanity. Mothering here is not only a socially assigned role, but a function of female embodiment. With scientific discourse deployed in defense of the status quo, descriptive biology is transformed into prescriptive sociology.³⁰

To understand this dynamic involves what Pierre Bourdieu calls the "paradox of doxa," or the fact that most individuals overwhelmingly accept the world as they find it. The sexual division of labor and gendered organization of society are so imbricated in everyday human life that the "symbolic violence" of masculine domination is largely imperceptible to men and women alike. According to Bourdieu, then, what is required is an analysis of "the principle of division," or nomos, which establishes sexual differences between male and female, recognizing how it is "simultaneously arbitrary, contingent, and socio-logically necessary." While the hermeneutic division of human experience into diametrically opposed concepts between male and female may appear arbitrary, in other words, its "objective and subjective necessity" emerges within human experience by way of a range of homologous symbolic oppositions – for example, up-down, above-below, front-behind, right-left, straight-curved, dry-wet, spicy-bland, light-dark, outside-inside, public-private, etc. – that also often correspond to corporeal motion. Such seemingly universal conceptual schemes not only "record as differences of nature" the differences

³⁰ N. Weisstein, "Kinder, Küche, Kirche as Scientific Law," in R. Morgan, ed., *Sisterhood is Powerful* (New York, 1970), 205-220; E. Wilson, *Sociobiology* (Cambridge, 1975), esp. final chapter; R. Dawkins, *The Selfish Gene* (Oxford, 1976), X; for more, see K. Lorenz, *On Aggression* (New York, 1967); D. Buss, *The Evolution of Desire* (New York, 1994); M. Ridley, *The Red Queen* (London, 1993); W. Atmar, "On the role of males," *Animal Behavior* 41 (1991): 195-205; R. Baker, *Sperm War* (New York, 1996); M. Daly and M. Wilson, *Homicide* (New York, 1988); G. Miller, *The Mating Mind* (London, 2000) and many more.

they create, but naturalize them by "inscribing them in a system of differences, all equally natural in appearance." In this sense, the durability and power of the masculine order turns on its lack of need for explicit justification; patriarchy relies on an androcentric vision the ostensible objectivity of which dispenses with the need to articulate a specific discourse of legitimation.³¹

In this way, the social order is both stabilized by and functions as a vast symbolic machine ratifying the very masculine domination on which it is founded. At the heart of this symbolic machine is the sexual division of labor, which is a very strict and consistent distribution of activities according to time, place, technology and sex. The division of labor by sex works to structure the experience of space – e.g., the oppositions between the market reserved for men, and the house reserved for women; or between the hearth as male part within the house, and the stable and stores as the female part – as well as the structure of temporal experience – e.g., the particular day in the cycle of seasons and agricultural growth; or the cycles of life with male moments of rupture and long, quiet periods of female gestation. Thus, human experience is always imbricated in a social world where the human body is already defined as a sexually-specific reality, and forms a corporeal repository of sexually-defining principles based on the principles of vision and division. Precisely because all experience is embodied – educated by way of a perceptual program applied to all worldly things, not the least of which is the body in its biologic

³¹ Bourdieu, *Masculine Domination*, 1-3, 7-9. Bourdieu notes it is "remarkable" virtually no myths of sociodicy explain or justify sexual hierarchy, with the notable exception of the myth concerning the origin of barley, cf. *Logic of Practice*, 76, 14; for examples succumbing to principles of vision and division in constructing and describing their analytical object using differences of ordinary language or terms saturated with normative implications, see J. Sherman, *Sex-Related Cognitive Differences* (Springfield, 1978); M. Parlee, "Psychology," *op. cit.*; "The Premenstrual Syndrome," *Psychological Bulletin* 80 (1973): 454-465.

reality – biological and anatomical sex differences appear as natural justification for the socially constructed difference of gender and the socio-sexual division of labor.

In this way, the definition of sex organs is always already social, the result of a social construction implying a series of phenomenologically available "choices" based on the selective emphasis of key differences that also (and necessarily) covers over certain other similarities. Far from providing a foundation for all other distinctions, then, the differences between the sexual organs of men and women are always already a social construction founded on the principles of androcentric rationality. The experience of sexuality in general, and the sexual organs in particular, is ineliminably circumscribed by particular social schemes of perception inherited by individuals and transmitted across generations through the education of desire. Neither necessary nor biological, sexual difference is forever experienced as and through particular bodies in motion and at rest.³²

Traditional essentialist ideologies are based on a division between natural and cultural, and all contain myths about a moment in time when the two realms split from each other. The justificatory or legitimating discourses of society thus turn on narratives of development concerning the origins of society. Sociodicy or cosmogony, the aim of such origin myths is unequivocal. At the origin of culture is a social order dominated by a male principle, which functions as a founding narrative to establish a range of socially acceptable human behavior between the constitutive duality of nature and culture, between the "sexuality" of nature and the "sexuality" of culture. Prior to any erotic

³² Bourdieu, *Masculine Domination*, 11-12, 14; for distribution of activities in the sexes, see *Logic of Practice*, 217; on the internal structure of the house, the organization of the day and the agrarian calendar, see Bourdieu, *Logic of Practice*, 271-283, 253-259, 219-248; for the ways naturalists contribute to the naturalization of sexual (and racial) differences, see L. Schiebinger, *Nature's Body* (Boston, 1993), 93-94, 120; for more on filling and the full/empty scheme, see Bourdieu, *Logic of Practice*, 277-278; for more, see T. Laqueur, "Orgasm, Generation and the Politics of Reproductive Biology," in C. Gallagherand and T. Laqueur, eds., *The Making of the Modern Body* (Berkeley, 1987).

experience, that is, stands an anomic act in which subjects are subject to a *nomos* that is simultaneously domestic and domesticating. A bare life liminal between the hierarchy of social order and the anarchy of cosmic order, man remains suspended, domesticated by the household – the site of cultivated nature – to exercise just dominion over woman. Between the active male and female passive principles, sexual relations appear as social relations of domination because they are constructed through these principles that create, organize, express and proscribe human desire: on the one hand male desire takes the form of an eroticized domination or possession, while, on the other, female desire is seen as an eroticized subordination to domination, or an eroticized recognition of masculine domination.

In this way, the process in which the naturalization of this social construction occurs inverts traditional notions of cause and effect. Precisely because the "paradox of *doxa*" involves the visible differences of male and female bodies always experienced within the perceptive constraints and practical schemes of an androcentric, patriarchal worldview, they simultaneously become the most indisputable register for meanings and values coincident with its primary principles. Insofar as gender is constructed as two hierarchical social essences, in other words, it is not the presence or absence of the phallus that forms the basis of such perceptions; rather, it is perception which – organized by sexually relational differences, i.e., male and female – is the condition of possibility for inserting the phallus between biological bodies as the objective foundation of sexual difference.³³

³³ Bourdieu, *Masculine Domination*, 19-20. For more, see N. Henley, *Body Politics* (Englewood Cliffs, 1977); J. Henslin and M. Briggs, "The Sociology of the Vaginal Examination," in J. Henslin, ed. *Down to Earth Sociology* (New York, 1991), 235-247.

Patriarchy and the androcentric worldview are thus continuously legitimated by the very practices they create. From the biological necessity determining the symbolic field, the sexual division of labor, and ultimately the entire natural and social order, then, biological difference is an "arbitrary" social construction of the male and female body — of its uses, pleasures and functions (especially in sexual reproduction). This social construct attributes to the body the seemingly natural character that forms the foundation for norms proper to human sexual behavior, the gendered division of labor, and even the entire cosmos. The peculiar strength and durability of patriarchal sociodicy thus derives from its function of combining two simultaneous operations: namely, it legitimates masculine domination by embedding the relation of a biological nature that is a naturalized social construction.

Human genders, then, exist only relationally as a consequence of the diacritical elaboration required to produce the intelligibility of bodies across a field of socially differentiated sexual differences. At once theoretical and practical, this formative process is educative in the fullest sense, for it occasions the social construction of the body only partially, here and there, and assumes the explicit and expressed guise of a corporeal pedagogy of action and desire. As a consequence of embodiment, patriarchal dispositions are the products of a negative prejudice against the female instituted at the origin of things. According to Bourdieu, then, women cannot but constantly affirm and reinscribe the prejudice responsible for their continuing domination. Indeed, he says, at work here is the logic of the *curse* in the strong sense – that is, a pessimistic self-actualizing prophecy yearning for its own fulfillment by facilitating that which it foretells. As a result, the androcentric representation of both biological and social reproduction is imbued with a

commonsensical objectivity, "a practical, doxic consensus on the sense of practices."

While women, of course, apprehend reality as well as men – and perhaps see even more acutely the power relations in which they are bound – such perceptions are the embodied consequence of precisely those power relations expressed at the founding, oppositional moment of symbolic order. In this way, Bourdieu writes, it "follows that their acts of cognition are acts of practical recognition, doxic acceptance, a belief that does not need to be thought and affirmed as such, and which in a sense 'makes' the symbolic violence which it undergoes." In short, by applying to the relations of domination categories constructed from the embodied perspective of the dominant, the dominated thus make such categories appear as if they are natural.³⁴

In this sense, Bourdieu opens the space to reconstruct prehistoric ideologies of gender and sexual mastery. By failing to account for what he terms the "objectivity of the subjective," traditional articulations of subjectivity and objectivity completely fail to accommodate the concrete experiences of embodied agents. While subjectivism fails to incorporate the material sociality always already shaping consciousness, objectivism fails to recognize the ways in which social reality is conditioned by the embodied experiences of individuals eating, living, working and dying in that world. Like Foucault, Bourdieu attempts to transcend this false dichotomy by developing a concept of agency apart from the voluntarism and idealism of subjectivism, on the one hand, and free from the deterministic and mechanistic causality of objectivism, on the other. Such an inquiry results in what he terms "genetic sociology," which combines analysis of objective social

³⁴ Bourdieu, *Masculine Domination*, 21-24, 32-34; see also R. Christin, "Possession," in Bourdieu, *et al.*, *The Weight of the World* (Cambridge, 2000), 309-316.

structures with analysis of the genesis, within particular individuals, of the socially constituted mental structures that generate certain behaviors.³⁵

The notion of symbolic force or violence is central. As a form of power exercised directly on bodies, "as if by magic, without any physical constraints," symbolic force works only "on the basis of the dispositions deposited, like springs, at the deepest level of the body." The transformative force of such actions is all the more powerful in being exerted, activated through largely invisible ways, insidious precisely in forming an insensible horizon of familiarity with a symbolically structured world. They take shape in the early, prolonged education of experience with interactions always already conditioned by structures of domination. To explain the primacy of the male principle thus involves incorporating a particular symbolic economy with the specific social (re)construction of kinship relations and marriage rites that attribute to women the social status as objects of exchange defined through male interests in the service of reproducing the symbolic capital of men. There is, of course, an essential ambiguity to this economy of symbolic goods, but above all it is oriented toward the accumulation of symbolic capital (e.g., honor or prestige) wherein various raw materials (women, above all, but generally any object formally exchanged) are transformed not into products, but gifts as communicative signs inextricably linked to material instruments of domination.³⁶

In this way, Bourdieu argues, to (re)produce agents simultaneously involves the (re)production of the categories constitutive of social organization, kinship relations and narratives of legitimation. To (re)produce culture, in other words, is to (re)produce the

³⁵ Bourdieu, *Logic of Practice*, 135; Bourdieu, *Distinction*, R. Nice, trans. (Cambridge, 1990 [1982]) 483; see also, Bourdieu, *In Other Words*, M. Adamson, trans. (Cambridge, 1990), 9, 14.

³⁶ Bourdieu, *Masculine Domination*, 35, 38, 40-41, 43; see also G. Pheterson, "The Whore Stigma, Female Dishonor and Male Unworthiness," *Social Text* 37 (1993): 39-64.

conditions of possibility for social reproduction – not only of sexuality – that ensures agonistic exchange aimed at the accumulation of genealogical status and lineage, as well as the durable rights and powers over people in the form of symbolic capital. Through the fundamental principle of division, the decisive weight of the symbolic economy not only organizes perception of the social world, but the entire cosmos – not only the economy of economic production, but also the economy of biological reproduction. The powers of generation thus inaugurates cycles of procreation as with the cycle of agricultural production, which privileges the mythical, ritual and local intervention of men, intervention always already marked by relations of domination, exploitation and subordination. Examples include the occasion of marriage or the advent of plowing in public, official, collective rites over private, informal, internal periods of gestation expressing only optional, furtive actions of the earth, winter or women. In this sense, then, on the one hand, there is a discontinuous and extraordinary intervention in the course of life – a risky, dangerous performance performed with solemn dignity – while on the other hand, there is a natural, passive process of swelling and incubation whose site is the body of the woman or the body of the earth, and which occasions support from its counterpart only as technical or ritual rites accompanying actions otherwise aimed to help nature in its labors. Such familiar, continuous, banal and monotonous toil is largely performed out of sight, in the shadows of the house or in the downtimes of the agrarian calendar. Masculinity, therefore, is eminently and only a relational notion, constructed both in front of and for other men and against women and femininity through a fear of the female, perhaps above all a fear of the female in oneself. In this sense, rather than some

originary metaphor transposed from the nonhuman world, domination is a consequence of fear and insecurity in the face of risk and uncertainty.³⁷

Yet this says nothing of what Bourdieu calls the "transhistorical continuity of the relations of masculine domination," which far from effecting a dehistoricization or naturalization of such power relations, in fact necessitates a complete reversal of the traditional formulation. This problematic, that is, compels men to articulate the question concerning the perpetually necessary labor required to dislodge masculine domination from history, and from the historical actions and mechanism responsible for its ostensible dehistoricization. Perhaps above all, however, the genetic sociology of Bourdieu points to the futility of calls for the suppression or supersession of such "philosophical" dualisms as between women and men, for not only are these dualisms deeply rooted in the nature of things and bodies, so to speak, but they do not spring from the superficial effect of naming alone and cannot be undone by some act of performative magic. Human genders, that is, are far from simple "roles" that individuals assume as if on stage, performed at will; rather, they are inscribed in the very bodies and world from which they derive their durable social utility. Rather than the performative power of language subtending gender, the order of gender subtends the performative efficacy of works. Like Foucault, Bourdieu thus links the unconscious, banal apparatuses governing socio-sexual relations not only to "individual ontogeny but to its collective phylogeny" in the long, only partly static history of androcentric thought and practice. In this sense, the visible changes affecting women throughout human history occlude and elide the permanence of the underlying

³⁷ Bourdieu, *Masculine Domination*, 44-47, 53. See also, L. Wacquant, "Why Men Desire Muscles," *Body and Society* 1:1 (1995): 163-180; on the economy of reproduction, see M. O'Brien, *The Politics of Reproduction* (London, 1981); for more on foods that swell and the function of mythically ambiguous or overdetermined actions of objects, see Bourdieu, *Logic of Practice*, 250-253 and 262, respectively.

invisible habits intelligible only through relational models elaborated around the domestic economy, and its concomitant divisions of work and powers in which men and women labor daily.³⁸

Instead of overcoming binaries, however, the genealogy of reductive readings offered above points in the end to a space beyond duality. The differences between nature and culture, necessity and contingency, open up more horizons of metaphor than have been so consistently and relentlessly transmitted across generations. When the symbolic register is amenable to plural metaphors of corporeality, desire and difference, the scope of potential meanings expands to encompass new metaphors for human sexual relations, recognizing again, and yet for the first time, metaphors already available in the world.

³⁸ Bourdieu, *Masculine Domination*, 102-103, 106-108; on performativity, see J. Butler, *Gender Trouble* (New York, 1993), 94; on Foucault and Bourdieu, see M. Foucault, *The Uses of Pleasure* (Harmondsworth, 1986), 35, 220.

CHAPTER II

FORAGING AND INEQUALITY

Human evolution history occurred in the last sixty-five million years of earthly history known as the Cenozoic, beginning two and a half million years ago with the Quaternary period and the Pleistocene epoch. Between contingency and necessity, human evolution occurred rapidly together with a series of environmental changes that coincide with the beginnings of contemporary human life. The two most important of these – the exposure of the Bering Strait and the Alpine-Himalayan orogeny – occur in the Pleistocene. During the earlier Pliocene (5.3 to 2.58 million years ago), the continental plates of the Western hemisphere join at Central America, while later in the Pleistocene (2.58 million to 11,700 years ago), Africa collides with Europe, closing the vast, prehistoric Tethys Sea. At the same time, India slams into Asia, giving birth to the Alpine and Himalayan mountain ranges as the spine of a massive landmass. Four ice ages scour the Pleistocene, and with each period of glaciation sea-levels drop to expose the bones of continents. As global sealevels decline, the water available as rain evaporates, and each time Europe, North America and northerly latitudes freeze under miles of glacial ice, while Africa, South America and southerly latitudes undergo rapid desertification.

The onset of maximum glaciation from 20,000 to 16,000 years ago presented humanity with a new global environment. A quarter of the earth was covered in ice, half the tropics were deserts; the world was cold and dry. Yet, at the height of glaciation an ice-free corridor stretched from Scandinavia to the Alps, and the Artic Sea to the Himalayas. As deforestation increased the grazing range of prey, glacial barriers

decreased the range of predators. With glaciers locking up water on land, humans traverse ice sheets and ocean floors, walking to Europe, north Siberia, Japan, Australia and the Americas. With new mountains and valleys came new opportunities and limits on a planet in flux. As glaciers retreat late in the Pleistocene, humans reach the outer limits of their terrestrial range, establishing those geographically and genetically distinct populations termed races that began as phenotypic adaptations to different latitudinal environments in the last ice age. At the same time, humans were evolving a range of adaptations that would allow the species to thrive in a variety of climate conditions. With increasingly sophisticated hunting techniques and rapidly growing populations, humans likely hunted certain species into extinction; this so-called "Pleistocene extinction event" mostly involved mammalian mega-fauna such as saber-toothed tigers and wooly mammoths. But with "synthetic adaptations" of fire, clothing and shelter, humans not only survived but thrived during the last ice age. These new adaptations inevitably shifted social relations, bringing higher populations, more cultural interaction, and increased the potential for conflict ¹

If the Pleistocene is important for these environmental changes, the concurrent Paleolithic (2.6 million to 10,600 years ago) is significant for its cultural ones. In fact, more than ninety-nine percent of human history occurs in the Paleolithic, which is divided into three periods. Between 2.6 million and 100,000 years ago, the Lower Paleolithic contains evidence for the first stone tools, the controlled use of fire, and the cooperative hunting of large game. The Middle Paleolithic is dated from 300,000 to

¹ D. Raynaud, J. Jouzel, J. Barnola, J. Chappellaz, J. Delmas, R. & C. Lorius, "The Ice Record of Greenhouse Gases," *Science* 259 (1993): 926-934; Ofek, *Second Nature*, 181; R. Schild, "Terminal Paleolithic of the North European Plain," *Advances in World Archaeology* 3 (1984): 193-274; Tudge, *Neanderthals, Bandits, and Farmers*, 16.

30,000 Y.B.P., and includes evidence for cooking and widespread human migration. No evidence for deliberate burials appear before the Middle Paleolithic; the awareness and understanding of death appears some 100,000 years ago. Finally, from 50,000 to 10,000 Y.B.P., in the Upper Paleolithic is the "creative explosion," with humans possessing an array of symbolic tools. Apart from the transition from *Australopithecus* to *Homo* itself, Robert Klein argues the transition from the Middle to the Upper Paleolithic is the "most dramatic behavioral shift that archaeologists will ever detect." So as the Paleolithic opens with the birth of the genus, by its end humans are painting in caves and incanting with stars at the far ends of the earth.²

The close of the Pleistocene begins the Holocene (11,700 years ago to present), and with it the Mesolithic (depending on location, from 20,000 to 10,000 and 9,500 and 5,000 years ago). In the Mesolithic are handmade tools, bows and arrows, seafaring and the domestication of the dog. In the ancient Near East the period is exemplified by the Natufian culture; from 12,500 to 9,500 years ago the Natufians begin to establish permanent settlements and experiment with agriculture. As the climate shifts, however, the carrying capacity of the Levant drops precipitously, forcing early sedentary Natufians back into more mobile patterns of subsistence. At the height of the last ice age the Levant undergoes dramatic changes, as forests retreat with increasing aridity and decreasing temperatures. Generally, the end of glaciation marks the beginning of regional Mesolithic cultures: in Europe, the Mesolithic begins with the Holocene and ends with the advent of farming; regions more affected by the ice age exhibit a more pronounced Mesolithic, often lasting thousands of years, with adaptations like sedantism, horticulture and higher

² J. Guilaine and J. Zammit, *The Origins of War*, M. Hersey, trans. (Oxford, 1991), 41; R. Klein, "The Archaeology of Modern Human Origins," *Evolution and Anthropology* 1 (1992): 5-14.

population densities developing over tens of thousands of years. Coincident foragers without proto-agriculture are often termed "epipaleolithic," yet by the late Mesolithic humans are hunters, fishers and foragers living in nomadic egalitarian bands at the cutting edge of the Stone Age.³

In this chapter, I examine the Mesolithic transition; proto-agriculture; early semisedantism and early forms of slavery. In the first section I examine the Pleistocene social contract and the Holocene paradox. In the second section I examine the dynamics that allowed for certain notable aspects of the contract to survive even with the transition to agriculture. In the third section, I trace the rise of ritual in the increasingly sedentary home around production and reproduction, death and the womb (artistic depictions of woman). Finally, I conclude the chapter with an analysis of the sedentary home, domus, and its function in the Neolithic transition. My thesis is that inequality did not emerge spontaneously at a given population density, nor when agriculture provided sufficient surplus, nor even after individuals accumulated enough sheep or land. Rather, inequality was created, constructed, elaborated throughout particular societies by way of specific norms and social habits. Inequality is the result of a collective effort supervenient upon the individual aim for prestige and respect. Regardless of any complimentary role other factors played, that is, hereditary inequality does not become an institution without the active efforts of human beings in the midst of everyday struggles to survive and thrive, eating, working, loving and dying.

³ Flannery and Marcus, *The Origins of Inequality*, 7; M. Balter, "Archaeology: The Tangled Roots of Agriculture," *Science* 327 (1964): 404–406.

Contingency and Necessity

While modern humans have walked the earth for some 120,000 years, making ornaments for 80,000 years and painting in caves for 25,000 years, the origins of inequality are late, dating to only around 15,000 B.C. Despite the diversity of human societies, it is striking how – of all the ways to organize human life – several were so successful they emerged repeatedly across the world; what is more, of all the ways to justify inequality, a few were so effective that dozens of cultures developed them independently over time. In this way, there are two general phases in the evolution of human cooperation: the first began some 3 million years ago with the birth of hominids and ended around 50,000 years ago with the last ice age; the second began shortly thereafter, between 40,000 and 10,000 years ago, with the transition to agriculture and the rise of stratified civilization. It remains an important question how and why the intimate, egalitarian world of the Pleistocene rapidly transformed into the impersonal, hierarchical world of the Holocene.⁴

To understand the origins of social stratification and economic inequality requires incorporating a range of factors, including hypertrophic population growth, availability of resources and adaptability to a given environment. There is, however, an entire category of factors that are cultural rather than environmental. Flannery and Marcus, for example, argue complex societies were possible only after social norms reduced the incentive to suppress self-interest, releasing groups to place less successful neighbors in a position of disadvantage. Yet each amplification of inequality required surmounting further resistance; the durability of achievement-based societies, that is, is at least partly related

⁴ K. Sterelny, "Life in Interesting Times," in *Evolution and Its Cooperation*, 89; see also K. Sterelny, "From hominins to humans," *Philosophical Transactions of the Royal Society, Series B* 366:1566 (2011): 809-822; R. Foley and C. Gamble, "The ecology of social transitions in human evolution," *Philosophical Transactions of the Royal Society, Series B: Biological Sciences* 364 (2009): 3267-3279.

to the opportunities they provide for ambitious individuals to gain prestige in appropriate ways. While exchange was unlikely to create many captives to enslave, it can, did and does create debtors to enslave. Neither slavery nor aristocracy had to wait for agriculture, in short, as several hunter-gatherer groups are well-known for divisions of institutional inequality and hereditary rank.

In fact, many prehistoric societies combined achieved and heritable inequality. The first signs for hereditary inequality emerge in Mesopotamia around 9,000 years ago – or 7,300 B.C. While social status and rank clearly represents a diminution of equality, hereditary rank is unique among hierarchies; precisely because it determines the rank of individuals by natal or sanguinary principles, there is relatively little social mobility. The level of stratification in a given society thus depends on both internal and external forms of inequality, or an unbalanced distribution of power in social relations. Because of this, most achievement-based societies have strong social norms encouraging members to give away any accumulated valuables, with only minor forms of self-love persisting until hereditary elites emerge. This ongoing conflict between those who desired to be superior and those who objected is why the most complex, stratified societies formed amid intense competition among clans, lineages and ethnic groups. In this sense, Stuart Piggot concludes civilization is "a most abnormal and unpredictable event," such that it is "the non-civilized societies of antiquity that were the norm" for much of human history.⁵

That agriculture creates inequality turns at least partly on the limited, exclusive nature of its primary resource: land. Land is both quantitatively limited and qualitatively exclusive, creating an opportunity for those who control it to acquire unequal levels of

⁵ Flannery and Marcus, *The Creation of Inequality*, 550, 553, 555-556, 551, 548, 559, 563; S. Piggot, *Ancient Europe* (Chicago, 1965), 20.

social power. Inequality emerges because labor is largely – or relatively – unskilled, and so easily coercible. Horticulturists rely on land, too, but its relative abundance with respect to population leads to its more extensive use and so lower levels of generalized competition. Above all, however, with agriculture it is not simply land that is critical, but fertile land; likewise, with pastoralism it is the mobility and fungibility of livestock that forms the critical economic fulcrum. While land and livestock are rich, dense resources, they are also alienable and fragile. Social inequality and economic stratification thus generally rises relative to the availability of fertile land and an increased dependency on material resources insofar as they are able to be restricted or concentrated. Exemplary in this regard are the complex foraging cultures of the Pacific Northwest. Salmon swimming upstream are concentrated at specific points, offering rich resources. Localizable and defendable, they become heritable wealth.⁶

Traditionally, the relationship of agriculture and inequality turns on the surplus it yields to individual cultivators. While initially social pressure prevents the development of inequality, hereditary wealth emerges as individuals and families accumulate surplus. Eventually, individuals who benefit most from inequality take control of the instruments of coercion to prevent any redistribution, increasing inequality dramatically. If institutions of violence exist, any desire to overturn the social order is balanced by the fear of negative consequences associated with revolution; in short, compliance assures hierarchical social relations are reproduced as a function social order.. As Kim Sterelny notes, however, this does not explain the emergence of social hierarchy, nor *a fortiori* its

⁶ E. Smith, K. Hill, F. Marlowe, *et al.*, "Wealth transmission and inequality among hunter-gatherers," *Current Anthropology* 51:1 (2010): 19-34; M. Shenk, *et al.*, "Intergenerational wealth transmission among agriculturists," *Current Anthropology* 51:1 (2010): 65-83; for an example of resource allocation in elephant seals, see M. Gurven, "To give and to give not," *Behavioral and Brain Sciences* 27 (2004): 543-583.

rapid widespread dissemination with agriculture; the question is how such an equilibrium is established without coercion. While social stratification was one equilibrium of early Holocene human life, that is, it was by no means the only one. Nothing about hierarchy precludes egalitarianism as an active alternative, for until institutions of coercion existed, rulers had no way to enforce their will. If, in fact, such egalitarianism was no longer a viable means to achieve social equilibrium after agriculture – and the evidence of a nearglobal transition of human societies to higher levels of inequality strongly suggests this – it is crucial to understand what it is about agriculture that precipitates this. Appeal to conditions after the establishment of hierarchy – when coercion was already available to those in a position to benefit from it – does not explain why social entrepreneurs gained control of an increasingly larger portion of the fruits of cooperation before the conditions to coerce the losers were present.⁷

A full account thus must include an explanation of what does *and* what does not occur. So even while areas with rich, dense and predictable resources might seem ideal for highly-motivated coalitions of the less wealthy to control and share the surplus, most inhabitants of pre-state stratified societies not only tolerated norms against sharing, they remained willing to participate in major projects of state-led collective action. It is wrong, then, to assume that non-coerced (i.e., economic) appropriation was no longer an option precisely because the key resources at issue were alienable rather than embodied forms of capital. As the social value of embodied capital diminishes, so too does its efficacy as a leverage for collective action. Even at this early point, that is, private property was fully a social institution. As Bradburd notes, people "own things because other members of

⁷ For a similar call, see D. Kennett, B. Winterhalder, J. Bartruff, and J. Erlandson, "An ecological model for the emergence of institutionalized social hierarchies on California's Northern Channel Islands," in S. Shennan, ed., *Pattern and Process in Social Evolution* (Berkeley, 2009).

society recognize their rights. If a society has material wealth and transmits it, then that occurs through social institutions." Even material resource wealth depends on social norms, conventions and values accepted by the social body; land and livestock surely require defense in pre-state societies, but if the demand were incessant rather than merely occasional, such property would in itself be of little use. The heritability of material capital is thus an explanatory target rather than explanatory source; because norms can make social capital heritable as well, individual status within a social network is often highly heritable (e.g. hereditary chiefdoms). As such, social inequality begins to shift on the continuum of human subsistence, from foraging and horticulture to agriculture and pastoralism, from hunting to husbandry to herding, which is coextensive with a shift to family control of wealth as it is consolidated into ever fewer hands.

The explanatory crux of accepting inequality thus concerns the stability of social norms and behavior, not simply the economic transition from foraging to agriculture. To understand the development of social stratification, then, requires an account of how particular social relations of property were established, maintained and reproduced over time. One possibility figures agriculture coevolving with norms that reinforce exclusive access to land and livestock. If such norms emerged before intensive stratification, early in the agrarian transition, they likely formed the foundation for other customs, practices and norms. In this way, property norms over land and labor were institutionalized prior to marked social stratification, for norms of social behaviors are often imbricated with other norms to become generatively entrenched as part of collective identity. Once norms are integrated ideologically – that is, through fully-articulated systems of belief and action – the normative force of any given norm is less directly relevant to individual expressions

of agency. That is, people will not experience belief in that norm as optional. Subjects will consider ownership of land as a preexisting fact, rather a controversial claim.

By contrast, the social norms of material property are a function of collective rather than individual behavior. After norms are institutionalized there is less variability in practice to provide opportunistic agents *epistemic leverage*. In this sense, it is "costly" for individuals – especially alone – to violate social norms, however maladaptive those norms are. Even if social recognition of property norms is necessary for agriculture, then, this is at best a partial explanation, and seems totally irrelevant for complex huntergatherer societies where wealth and power depend on naturally-occurring, high-value and predictably locatable resources. But, of course, even the most fully entrenched norms are not entirely immune to challenge when societies are under internal or external stress. Social unrest is often disruptive to everyday human life, and when basic norms are challenged in the course of social change, entire cultures can collapse. It is thus prudent to avoid the fallacy that stratified societies are stabilized by catastrophic costs of potential social collapse if cooperation and collective action fail.

High levels of social stratification, in short, emerge in economies where material capital increasingly assumes greater significance than embodied capital, with institutions and norms facilitating and legitimating the accumulation and heritability of such capital. Once the switch to hierarchy takes place, it is surprisingly stable. However, as Sterelny notes, the stability of these cultural institutions is an explanatory problem in itself, for as stratification increases, structures increasingly serve the interests of an ever-smaller part of the social body.⁸

⁸ Sterelny, "Life in Interesting Times," 98-101; Dubreuil, *Human Evolution and the Origin of Hierarchies*, 182-183; B. Winterhalder and D. Kennett, "Four neglected concepts with a role to play in explaining the

Hiam Ofek identifies two constraints to the adoption of agriculture for more than ninety percent of the time modern humans have walked the planet; namely, risk and uncertainty across states of nature; and dietary restrictions imposed by specialized food production for a species that evolved for millions of years with "a highly eclectic feeding ecology." Risk and uncertainty are key constraints in agriculture, and climate instability blocked the way for a long time. Ofek argues the creation of exchange and distribution was key to the transition to agriculture, for without exchange it could not have spread as it did. With dramatic climate fluctuations at the end of the last ice age, risk management - especially concerning food - was soon central to human social life. Especially before projectile weapons and canine domestication, hunting and other forms of cooperation were effective in mitigating *risk*. In the extreme conditions of the last glaciation between 70,000 and 10,000 years ago, the estimated 35,000 late Paleolithic humans had to remain mobile and use a variety of strategies to minimize risk and maximize windfall profits. The concept *risk*, and the need to organize the economy in relation to it, provided further sources of support for the cultural order; after all, the economy is a socio-cultural projection of order onto nature, with risk simply being a certain conceptual foregrounding of the persistent dangers within that imposed order. 10

The creation of agriculture in this period brought higher population densities and the possibility of surplus through storage. Both would lead to different social orders in which powerful rulers held sway over larger numbers of people. People became more dependent on trade and relationships with other human communities; sedentary lifestyles

origins of agriculture," Current Anthropology 50:5 (2009): 645-648; on norms to trial and error, see K. Sterelny, "SNAFUS: An evolutionary perspective," Biological Theory 2:2 (2007): 317-328; on social norms leading to social collapse, see J. Peires, The Dead Will Arise (Bloomington, 1989). Ofek, Second Nature, 205, 211-212, 226.

¹⁰ T. Champion, C. Gamble, S. Shennan, and A. Whittle, *Prehistoric Europe* (London, 1984), 60-61.

led to more conflict; and once people had settled permanently there was no way to avoid conflict without withdrawing completely. Agriculture and trading rose in tandem because trading mitigated the risk of relying on crops for food. And so amid the bounty of the "mid-Holocene optimum," agriculture emerged amid the earliest conditions of possibility for those relatively new artifacts of human behavior known as civilization. The Holocene has been unusually stable from a climatic perspective, especially in terms of temperature, which suggests such climate stability may be the exception rather than the rule. Recent data indicate the mid- to late Pleistocene was both harsher and more volatile than previously thought; significantly, while such exposures occurred previously in the evolutionary experience of humans, none reached the extreme of the late Pleistocene. In fact, climate instability was not confined to the last glaciation, but appears as the norm over the last several interglacial cycles. Global climate change is to agriculture a regional phenomenon.¹¹

So, while it is hard to imagine humans without agriculture, its invention was not inevitable, but the result of contingent environmental conditions. Prior to the Holocene, that is, climate instability would have made agriculture too risky, perhaps impossible. Because new subsistence strategies develop only out of necessity *or* where risk is affordable, a relatively stable social and natural environment was in all likelihood required for the first "farmers" to dedicate the time and resources for initial plant and animal domestication; as Hiam Ofek observes, there is "no form of agriculture that makes economic sense but one that is stable." Agriculture was not possible for upper Paleolithic people, nor for their ancestors going back to the last glaciation, and perhaps even to the

¹¹ W. Dansgaard, S. Johnsen, H. Clausen, *et al.*, "Evidence for General Instability of Past Climate from a 250-kyr Ice-core Record." *Nature* 364 (1993): 218-220. T. Price, *Europe's First Farmers* (Cambridge, 2000), 5; V. Childe, *Man Makes Himself* (New York, 1951), 75; Ofek, *Second Nature*, 184-185.

previous interglacial, which was at least as long and as warm as the present one. Thus the creation of agriculture was not delayed by lack of human capacity, but by the absence of proper conditions.

In this sense, agriculture is a contingent adaptation of the current interglacial. It is an adaptation to the latest warm and unusually stable climate of the last 10,000 years or so. After the end of the last ice age, the climate became milder; the Younger Dryas then plunges the world back into a thousand years of cold, dry conditions, after which the mid-Holocene optimum allows humans to begin again the practices developed prior to the change. Agriculture, in other words, began early in the Holocene, stalled in the Younger Dryas, and resumed and flourished in the mid-Holocene optimum. There was a point at which agriculture was profitable before climate change interrupted; sedentary populations became mobile again, resuming nomadic patterns associated with hunting and gathering. Some agrarian settlements survived the Younger Dryas, and during the next 5,000 years the global population grew as agriculture spread rapidly. At the end of the mid-Holocene optimum, however, as the climate began a steady march away from the ideal conditions for agriculture, the marginal profits of subsistence agriculture compelled larger economies of scale, centralized infrastructure and regulation, and a generalized social division of labor, all as populations began a relatively rapid orbit into urban centers.

Cooperation and Competition

Humans are distinguished by their ability to engage in intensive, complex cooperation with other members of their species. Humans not only live in communities, share food and resources with other members of their households and groups, and practice altruism,

but use language to coordinate more elaborate projects than would otherwise be possible, such as hunting wild game, farming and building large structures. This ability has been central to human evolutionary success, yet the apparent universality of cooperation raises a question as well. Since the development of agriculture, human societies have become larger and more stratified while becoming, in many respects, less cooperative; the rise of farming also saw a rise in competition and hoarding of resources by a small social elite. This competition was harmful to most of society, including the poor and enslaved. This move away from egalitarianism, furthermore, took place before institutions existed to enforce class divisions and property. It is thus unclear why this new ethos of competition could have lasted long enough for states with centralized power to come into being.

Between the emergence of anatomically modern humans some two million years ago and the rise of stratified agricultural societies around 10,000 years ago – or more than ninety-nine percent of human evolutionary history – the social life of the species was organized around small, nomadic bands of hunters and gatherers. Intimate, cooperative and largely egalitarian, communities were small, relatively homogenous, and involved a range of reciprocities – for example, men hunt while women gather food and care for offspring. Social relations are often long-held and often-repeated, with minor costs and benefits for any interaction. In this context, with only a few commodities in circulation, exchange is conducted on an iterative, or repeated, basis, which has two results. On the one hand, the simple exchange of commodities makes disparities more salient; the value of goods is more easily discernible, in other words, just as the exchange of equivalents functions as the norm of exchange. On the other hand, the iterative nature of interactions provides neither opportunities nor incentives to cooperate, especially if there are rewards

for defection or costs to victims; iterated relations tend to discourage competition if the profits of competition over time are large compared to the resources or rewards at stake for any given interaction.

In this way, social cooperation based on reciprocity is stable, distributing benefits widely. In such a community, people share resources with the group, healthy young people with greater foraging abilities share surplus with children and the elderly, and hoarding is discouraged. This ideology of cooperation disintegrated with agriculture; each household was now responsible for feeding themselves, and individuals were no longer penalized for seeking power and wealth. Yet, the existence of collective action continued to persist in agricultural societies, although it no longer benefited all group members equally. As the basis of this species-contingent social behavior was undermined, many pre-state stratified societies left clear evidence of collective action in two main categories: utilitarian (e.g., irrigation or fortifications) and ideological (e.g., temples and burial mounds). It is evident that collective action in unequal societies has an obvious explanation once hierarchical command and control systems backed by force have developed; after social power is reinforced by police, armies and state officials, participation in collective action may be the least bad option. Yet these systems of command by coercion took many generations to develop. In the absence of coercion, it is not clear why people would take part in collective action to only benefit social elites.

Cooperation persisted as human groups became larger and more stratified.

However, the most common forms of cooperation harmed, rather than helped, the life prospects of those at the lower strata of society. Evidence for cooperation and collective action is clear in early states, for their central mechanisms entail effective hierarchical

social organization. Collective resistance thus faced a range of intractable coordination problems, which often made the least bad option to cooperate in state action despite its appropriative ends. Cooperation obviously turns on a certain respect for and understanding of social norms, but more interesting perhaps is how the stable conditions for the foraging social contract survived and were reproduced in the agricultural transition. According to Sterelny, the collapse of the Pleistocene social contract turned on two basic changes. On the one hand, wealth assumed a form that was able to be accumulated and transmitted across human generations; on the other hand, social norms recognizing and protecting that new wealth stabilize and assume institutional form. Both changes, crucially, are required for elites to escape the social norms of egalitarianism.¹²

Even as the transition to agriculture undermined certain norms of cooperation, the important point is that they did not disappear entirely. In what Kim Sterelny calls the "Pleistocene social contract," economic cooperation reinforced and supported reproductive cooperation; if a pair was successful economically, that is, the risks and costs of re-pairing incentivized strong relational bonds. These social relations facilitated the development of extensive forms of intergenerational kin-based cooperation. The aim is to explain how and why the Pleistocene social contract was adapted by post-agrarian societies in what Sterelny terms the "Holocene paradox." Whereas the first created the basic contours of foraging societies – i.e., kin-based units organized around egalitarian cooperation with a sexual distribution of knowledge and skill – the second created a fully domesticated human while dispensing with many of these long-held facets of social life. Whereas the Pleistocene social contract involved egalitarian cooperation in a foraging

¹² Sterelny, "Life in Interesting Times," 95-97; on incomplete resilience, see T. Currie, S. Greenhill et al., "Rise and fall of political complexity in island South-East Asia and the Pacific," *Nature* 467 (2010): 801-804.; S. Mithen, *After the Ice* (London, 2003), 67.

economy, by the Holocene human social groups are dramatically transformed into agrarian economies based on competitive exchange.

Over the course of millions of years, then, not only did sufficient common interests emerge among Pleistocene foragers to stabilize social relations of cooperation, in only a few thousand years it would turn decisively back to hierarchy. Across the world, stratified but still localized societies of the ancient Near East, China, Europe and the Americas all begin to contain significant disparities of wealth and power; polygyny replaced monogamy in many places; formerly isolated groups are now in close contact with strangers or near-strangers. While for an overwhelming majority exchange was largely limited to the household, high-value goods begin to circulate among the elites everywhere. As inequality intensified, however, societies everywhere remained largely stable; the generative conditions of the Pleistocene social contract no longer exist, yet the contract itself seems to have survived in new ways. Rather than a lack of competition, it remains to identify how forager egalitarianism was undermined and reproduced in the transition to agriculture.

The question, then, is how and why ambitious individuals introduced hierarchy before the institutions or technologies of coercion existed. Such would-be elites aiming to institute hierarchical social relations with respect to surplus first needed to make such actions palatable to their peers; prior to the ability to pay for the means of coercion (and so make acceptance redundant), such social entrepreneurship was likely the only way to challenge group norms meaningfully. A king, for example, can either establish himself in a fortified building and fight with a paid army, or he can conduct shrewd diplomacy and thereby establish himself first among equals, but this is precisely what he cannot do when

each member of the group holds roughly equal power. Paul Seabright terms this the "egalitarianism of countervailing power," or the internal resistance to the development of inequality, constantly policing the social boundary for ambitious individuals. For Boehm, it is simply in keeping with the desire to avoid domination that foragers manage to make egalitarianism happen, and to do so in spite of human competitiveness. People can arrest these behaviors by reacting collectively, often preemptively, to prevent individuals who show signs of wanting to dominate others. Reactions involve fear, anger, defiance and a collective commitment to dominate based on a fear of being individually dominated.¹³

While foraging involves a web of cooperative relationships – and so presents a classic sociobiological case of altruism – there are compelling models for the stability and resilience of cooperation in the face of temptations to defect and expropriate common resources. In terms of stability, social norms and political dynamics are as equally as significant as environmental variables and demographic trends. For Boehm, that is, egalitarian politics is a conscious, deliberate means of social control aimed at obviating hierarchical social behaviors. And while early ethnographers romanticized the tranquility of foraging social life, it has become clear since that egalitarian hunter-gatherers regularly cope with ambitious individuals willing to impose their prerogatives against established norms. According to Boehm, there are two basic components to egalitarian social control, both of which support a view of foraging bands as egalitarian intentional communities. On the one hand, the small moral community in which there are strong

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¹³ Boehm, *Hierarchy in the Forest*, 90; for an phylogenetic analysis of 84 Austronesian-speaking societies, see T. Currie, S. Greenhill, R. Gray, T. Hasegawa, and R. Mace, "Rise and Fall of Political Complexity in Island South-East Asia and the Pacific," *Nature* 467 (2010): 801-804.

forces for social conformity; on the other hand, the deliberate use of sanctions to enforce a level of political equality among adult males.¹⁴

Politically, foragers can be egalitarian or nonegalitarian, but nomadic foragers – often called *bands* – are always egalitarian; in contrast, *tribes* are often depicted as an intermediate waypoint between egalitarian bands and hierarchical chiefdoms. Tribes are nonliterate people who live in small, locally autonomous social groups with domesticated plants and animals, organize social life according to an egalitarian ethos, and refuse to permit strong authority to develop in everyday group leadership; they are prone to raiding, feuding and territorial warfare, and often form inter-tribal coalitions. Their difference from foragers is thus ecological: whereas foragers hunt and gather exclusively for subsistence, the ethnography of tribes include pastoralists and semi-nomadic horticulturists as well. Nomadic or not, then, tribes have domesticated plants and animals while foragers do not; politically, tribes are able to continue forager egalitarianism under a wide variety of conditions, even as their units of political organizations grew large.¹⁵

The first social groups of humans to develop hereditary inequality are kin-groups, clans and other societies based on family relations. Raymond Kelly identifies a central distinction between those foragers living in permanent social groups beyond the extended family and those who do not: while one is born into a *family*, or kin group, he argues, one must be initiated into a *clan*, or any social organization beyond extended family groups. Rituals are a primary means of initiation, and while clanless societies do have ritual and symbol as part of social life, clan-based societies are organized around many overlapping

¹⁴ Boehm, *Hierarchy in the Forest*, 60-62; For more on bands and tribes, see R. Service, *Primitive Social Organization* (New York, 1962); M. Fried, *The Evolution of Political Society* (New York, 1967); for attempted clarifications of this lexicon, see M. Sahlins, *The Segmentary Lineage* (Chicago, 1961) and *Tribesmen* (Englewood-Cliffs, 1968); M. Fried, *The Notion of Tribe*, (New York, 1975).

¹⁵ Boehm, *Hierarchy in the Forest*, 65.

levels of ritual. (Contemporary Bedouins remain a clan-based society, for example, while most Native American tribes are classified as kin-based societies.) The creation of larger social units would have escalated symbolic behavior, which explains why the behavior appears differently over time and space. Societies with clans enjoy advantages that clanless ones lack: large groups of people, claimed as relatives, on whom they can rely for defense from enemies, for amassing food and valuables, or to help them assemble resources for a bride. Raymond Kelly notes "[c]lans have an 'us versus them' mentality that changes the logic of human society. Societies with clans are much more likely to engage in group violence than clanless societies," which is related to the origins of war.¹⁶

While hunter-gatherers do not organize social life with offices or roles involving unambiguous lines of personal authority, they maintain and control social and political life to a substantial degree by acting as a community. The end result is nothing like anarchy; the band acts as a cohesive group of adults in a position to speak with collective authority, and to behave dominantly in governing the individual behavior of deviants. Paul Seabright examines several possible explanations for the origins of social hierarchy using the concept of egalitarianism of countervailing power. Coercion may have been easier to institute than is often imagined; the mere threat of social exclusion, for example, likely functioned as a profound disincentive to disrupt new social relations once they began. Unlike farmers who have fewer strictly collective tasks, foragers cannot afford to lose manpower for group subsistence work, and individuals or even small groups often have a difficult time surviving after expulsion from the group. In this way, the mere threat of social exclusion may have been more coercive to foragers than early farmers.

¹⁶ R. Kelly, Warless Societies and the Origin of War (Ann Arbor, 2000); L. Keeley, War Before Civilization (Oxford, 1996); S. LeBlanc, Constant Battles (New York, 2003); K. Otterbein, Anthropology of War (Long Grove, 2009).

The egalitarianism of countervailing power, moreover, was likely an equilibrium only in a statistical sense. Occasional hierarchs among foragers would little influence the trajectory of inequality. While not all attempts to institute hierarchy were successful, some did; yet the exceptions remained so, and enjoyed no greater capacity for social reproduction than the failures. After agriculture, however, a successful anomaly had more opportunities for inter-generational success as the concentration of surplus now allowed agrarian armies to conquer more egalitarian neighbors. In this way, though the greater mobility and adaptability of foragers gave them an advantage only concentrations of manpower could overcome, the sheer number of men available to early agrarian hierarchs was a decisive advantage over forager chiefs.

Early entrepreneurs of the state almost certainly manipulated social norms to their own ends as well. While individual foragers sacrificed their own interests in warring with rivals, potential hierarchs could effectively appeal to outsider hostility to justify many kinds of "necessary" sacrifices. As Seabright points out, however, this does not explain why such relations of in-group altruism and out-group competition grew so much easier with the transition to agriculture; nor does it explain why sacrifices are easier to justify insofar as they are shared collectively. Before later developments of explicit legitimating ideologies, then, it remains to be explained how previously egalitarian foragers were influenced by such appeals. In the end, Seabright concludes that in-group altruism may have co-evolved with out-group hostility through a social innovation that introduced hierarchy without causing the typical resistance against the rise of powerful individuals, namely, enslavement.

Agriculture makes the use of war captives as slaves far more useful and tempting. The ethnography of modern foragers suggests, and the archeology of the late Pleistocene confirms, that intra-group forager warfare was common and lethal. Defeated men were killed and women assimilated into the winning population; males were a "negative resource" without the means to ensure compliance without force and supervision; indeed, foraging is rather ineffective at the point of a spear or in chains. Agriculture changed this with work that could be performed productively by coerced individuals – by slaves, in fact. Plowing, weeding and harvesting can all be done by workers sufficiently restrained to prevent escape, who can be supervised by a smaller number of people; none of this is true with foraging. The first hierarchical groups may have been included early indigenous farmers who expanded their wealth by accumulating war captives from rival groups, thus making it relatively easy to construct institutions of coercion aimed at creating and maintaining hierarchy. In this way, the earliest enslaved men were likely an inducement to the first farmers who helped the first hierarchs establish power, thus tipping the balance for subordinate males against resisting joining the rising lord. In short, enslavement preceded slavery, or institutionalized coercion, not vice versa.¹⁷

Alterity and Solidarity

As the first villages emerged between 10,000 and 8,500 years ago, conditions were already such as to facilitate the relatively rapid uptake of more intense forms of slavery.

¹⁷ Seabright, "The Birth of Hierarchy," 111-115; S. Shennan, "Property and wealth inequality as cultural niche construction," *Philosophical Transactions of the Royal Society, Series B: Biological Sciences* 366 (2011): 918-926; Hayden, "A New Overview of Domestication," in Price and Gebauer, eds., *Last Hunters, First Farmers*, 17; S. Bowles, "Did warfare among ancestral hunter-gather groups affect the evolution of human social behaviors?," *Science* 324 (2009): 1293-1298; for a full account of this argument, see S. Bowles and H. Gintis, *A Cooperative Species* (Princeton, 2011).

Just as sedantism is more conducive to slavery than nomadism, larger, denser populations are more likely to have slaves than smaller ones. Where food is abundant and easy to procure, moreover, slaves have more potential economic uses than when food is scarce or difficult to obtain; groups practicing food preservation also appear to have a greater likelihood of slaves, as do those with higher levels of commercial trade and/or craft industries. In short, slavery is more likely to be found in societies with more wealth: where subsistence depends on capital, slaves are generally not wanted, and where only highly skilled labor is required, slaves are often not of much use. Finally, in highly bellicose societies in need of warriors more than workers, slavery is less likely to exist. With several notable exceptions, then, very few hunter-gatherer societies have kept slaves or clearly displayed high levels of social inequality, and when they have such practices were of relatively little social or economic significance. That said, those societies based on fishing have often held slaves, and used them in various productive ways. In this way, contemporary views remain committed to the general claim that, prior to agriculture, hunters and gatherers lived in relatively egalitarian social formations where the accumulation of wealth was communal and inequality largely nonexistent. 18

Robust evidence indicates that foraging cultures were substantially more egalitarian than nearly all societies after the widespread adoption of agriculture; the notable exceptions were complex hunter-gatherer societies like those of the Pacific Northwest, who enjoyed some benefits of sedentary life without cultivation. Despite such exceptions, a rich body of evidence exists for relatively egalitarian societies with

¹⁸ H. Nieboer, *Slavery as an Industrial System* (Cambridge, 2010 [1900]), 254-260; Patterson, *Freedom*, 12; for data on foragers for whom slavery was significant, see Patterson, *Slavery and Social Death*, Appendix 2; Flannery and Marcus, *The Creation of Inequality*, 66-87; for more, see C. Hastorf, *Agriculture and the Onset of Political Inequality Before the Inka* (Cambridge, 1993); C. Gosden and J. Hather, eds., *The Prehistory of Food* (New York, 1999).

complex, diverse divisions of labor; the most egalitarian are found among hunter-gather peoples with high levels of economic interdependency. For most, while women supply much of the subsistence, nearly everywhere the hunt is considered the most valuable food, used for both gift and economic exchange. Competition is ritualized in musical and athletic contests, yet discouraged in daily life. Despite some disagreements on how to interpret the evidence, moreover, there is general consensus that the relative status of men and women in such societies is "separate but equal." The sexes perform different tasks and social roles, but are similar in status and respect; however, even in these groups it is rare for women to be as powerful as men. There is no known society where women enjoy decision-making power over men, nor where women define sexual norms through control of the marriage exchange. Only in horticultural societies are women frequently dominant or highly influential economically, and even these tend to be patrilineal despite the economic role of women. Matrilineal horticultural societies mainly appear under specific ecological conditions – e.g., near forest borders and without domesticates – which are disappearing nearly as fast as the groups living there. ¹⁹

Despite the existence of gender hierarchy in forager societies, it greatly increased with the shift to farming. Kinship, too, shifts from matrilineal to patrilineal with such regularity as to suggest correlation with the emergence of property. As communities increasingly settled in permanent places over time, the functions and characters of their slaveries changed as well. Increasingly, that is, slaves were incorporated into economic and extra-economic uses. So, while vestigial aspects of the symbolic roots of slavery no doubt persisted, the advent of agriculture coincides with the increasingly wide-spread

¹⁹ N. Tanner and A. Zihlman, "Women in Evolution," *SIGNS*, 1:3 (1976): 585-608; Martin and Voorhies, *Female of the Species*, 190, 214; Boulding, *The Underside of History*, 291; Lerner, *The Creation of Patriarchy*, 30.

economic significance of enslavement. From supplementing domestic labor and fulfilling jobs of toil and drudgery, to serving in military, financial, and administrative roles and satisfying the sexual desires of masters, as societies became dependent upon agriculture to satisfy the needs of life there is a striking correlative increase in the direct, personal, and violent domination of human beings to produce, distribute, and consume these new necessities for life. In this way, not only does the sheer number of slaves held by agricultural societies differentiate them quantitatively from their foraging counterparts, the functions and consequences of their respective enslavements distinguish them in important qualitative ways as well.²⁰

Many forms of unfreedom coexisted in prehistoric societies. While concubinage and enslavement of foreigners coincided in China, Egypt and elsewhere, attendant concepts of hierarchy, dependency and slavery develop over a long period, and several centuries pass before obverse concepts of freedom emerge. According to Orlando Patterson, early societies had "an unusual ritual preoccupation with slavery," which is to say primitive forms of slavery were rarely economic and appear to be largely communal, symbolic and social in significance. From the little evidence available, then, slaveholding in such societies was often more an expression of power and authority, functioning as a primitive form of alterity by which the community self-identified through various rituals of segregation and solidarity.²¹

Within such societies, the deferential behavior of slaves becomes a shared social good, an object of communal solidarity, that strengthened the constitutive inside of

²⁰ J. Guilaine and J. Zammit, *The Origins of War* (Oxford, 2005), 82-86; T. Price, "Social Inequality at the Origins of Agriculture," in *Foundations of Social Inequality*, T. Price and G. Feinman, eds. (New York, 1995), 129-151; A. Johnson and T. Earle, *The Evolution of Human Societies* (Stanford, 2000), 11-12. ²¹ Patterson, *Freedom*, 19.

communities in which they were embedded. In this sense, the slave was a dominated enemy within; they were kinless, clanless and socially dead members of communities for whom their presence constituted a living negation of what it meant to be alive and included in the social body. In bringing war home, Patterson notes, slavery "made possible both the continuous exercise of vengeance and its most dramatic ritual expression. The slave became a kind of cultural money, a medium of social and ritual exchange, and a living expression of the value of freedom, and of the enormous risk of losing it in warfare." That the earliest functions of enslavement were social is significant. Enabling group identity, rituals of enslavement incorporate even those not directly implicated in the slave-relation by intensifying ties of social solidarity between slaveholders and non-slaveholders. The community shares in the collective honor of slaveholders by accepting their claim to honor, and by assisting in the capture and cooperating in the control of the enslaved. Without at least implicit support from other members of the community, that is, slaveholding for the few would be impossible. By circumscribing inclusion in the social order, the experience of negation – of *not-being* a slave – must have been acute and profound. As the body through which community identity is generated, the enslaved constitute the they that makes us possible. Eventually, Patterson argues, slavery becomes a "revolutionary force engendering civic freedom":

Incipient or proto-civic freedom, then, is found in the most primitive social formations having slavery. We are bonded together in love, because others are bonded to us in hate. Before the slave came into being, [group identity was defined] only by going to war and risking death. With slavery – with even one solitary slave – all the social and political functions of war were institutionalized,

realized without risks, and given ritual expression. But slavery did more. Unlike war, it began to identify, for the first time in human history, the community with something new, a new value, that being not-slave, not constrained, not socially dead – in other words, at least implicitly, socially free.

Nonetheless, such primitive forms of slavery were "a historical dead end," and largescale slavery had to wait for agrarian societies to reinvent freedom as a social value.²²

Early agrarian slavery was likely regional in scope and inter-tribal in character. For agricultural people living in a settled, permanent place, the anticipated amount of food resources turns on the relative population density and a generalized scarcity in land. As agrarian habits are transmitted across generations, the accumulation of wealth in the form of land increasingly intersects with methods of cultivation (i.e., fallow system), on the one hand, and the laws and customs governing agricultural labor (i.e., the experienced meanings of labor), on the other. There is generally a low incidence of extensive agriculture and slavery, especially in the acquisition or production of food. Because extensive agricultural societies are characterized by a sparse population spread over a large area (i.e., abundant land), the powers required for their slaveries tended to be direct, personal, and violent.²³

By contrast, with intensive agrarian societies there is a dense population in a smaller (or at least more limited) area, and so land is relatively scarce. Increasingly intensive forms of agriculture require more labor, which can come from two sources, namely, increased population through higher birthrates, or from various forms of coercion such as war, kidnapping, rape, and slavery. Captured enemies gain a new value

²² Patterson, *Freedom, vol. 1*, 12-14, 17-19.

²³ Boserup, *The Conditions of Agricultural Growth*, 73-76, 81, 84, 90.

with sedantism. Slaves increase the population without the labor and capital otherwise required, because high population growth requires high investments of social capital. Power in such societies is often indirect, and occurs by way of dispossession and deprivation of the ability to acquire independent subsistence. As such, hunters, gatherers, nomadic herders and extensive agrarians were often a convenient source of slaves for more intensive agriculturists, forming a "permanent reservoir" of human chattel, unable to escape their sedentary predations nor match their military force. Childe argues

Neolithic advances related to the plow, irrigation, and the rise of towns made it possible to employ slaves in a productive way.²⁴

This thesis, however, adopts too simplistic a view of the relationship between slavery, society, and economy, while simultaneously neglecting the question of reproduction, both of the individual and the social system, without which you cannot understand the phenomena in question. As more sedentary communities emerged, however, the experience of insiders and outsiders led to a form of communal justification of war and raiding. With an incipient principle of social fungibility already in place, any member from another group could be subject to death by war and enslavement. While some warriors returned home with booty and other trophies, others returned with the women and children of the slain for slaves. Within such a context, the basis for larger-scale conflict and war was laid.²⁵

Nomadic foragers tend to act in proprietary ways about their resources while at the same time avoiding intensive war; despite intergroup hostilities among most tribes, that is, they often remain low-level conflicts like feuding and raiding. And while foragers

²⁴ V. Childe, "Early Forms of Society," in *A History of Technology, vol. 1,* C. Singer, E. Holmyard and A. Hall, eds. (Oxford, 1954), 43.

²⁵ Flannery and Marcus, *The Creation of Inequality*, 550.

engage in revenge killings, nomadic hunter-gatherers show little inclination to completely eradicate proximate or competing groups. Keeley reports the first prehistoric evidence for intensive genocidal conflict is in the Neolithic, after the advent of nomadic tribes and sedentary foragers. With asymmetrical natural resources and rapidly rising populations, neighboring groups of foragers and early farmers inevitably came into conflict. Evidence suggests encounters were often violent, or at least full of suspicion and contempt that accompanies most uncertainty and fear. Violence was clearly a feature of Mesolithic hunter-gatherer societies, then, the first clear evidence for which is thought to have been precipitated over territory bordering the Nile, rich in resources. Bender suggests that kinbased, household competition led to the intensification of production, and so the adoption of agriculture, yet as the Natufian example indicates, these are the very structures that open the potential for increased levels of social stratification. For Brian Hayden, the emergence of differential hierarchy in resource-rich areas was a central impetus for domestication through intensified status competition. Problems at the intersection of optimal and marginal foraging grounds likely provided the impetus to cereal-eating and cultivation in the first place; hunters and gatherers typically eat well, but if some areas were so fertile as to raise population levels, surplus people were forced to move into more marginal territory, thus giving rise to the need for experimentation. In this sense, at the intersection of adaptation, innovation and a land full of contrasting ecologies marks the contemporary world. Indeed, some scholars even argue cultivation itself began from ritual or religious needs, rather than biological imperatives as such.²⁶

²⁶ Boehm, *Hierarchy in the Forest*, 91, 94-95; Flannery and Marcus, *The Creation of Inequality*, 76; see also O. Bar Yosef, "The Natufian in the Southern Levant," in C. Young, T. Smith and Mortensen, eds., *The Hilly Flanks* (Chicago, 1982); G. Wright, "Social Differentiation in the Early Natufian," in C. Redman, ed., *Social Archaeology* (New York, 1978).

The sites known as Lepenski Vir I and II offer insight into the lives of sedentary hunter-gatherers just before the transition to agriculture. Intensive use of wild resources and some sedantism is required prior to the genetic changes linked to domestication. Because the process is long and slow, it is impossible to identify the precise moment of domestication for any species; for example, while sheep may have been domesticated as early as 9000 B.C., genetic changes are evident only in the eight and seventh millennia. Likewise, while there is evidence for intensive gathering in the Near East from at least the tenth millennium B.C., pollen evidence dates domestic cereals at Jericho from 8000 B.C. While there is some grinding and preparation of wild foods within settlements, in the late Pleistocene Levant there were still no sedentary villages, and only meager evidence links the storage and processing of food to the household. In this way, Ian Hodder notes, the proliferation of Neolithic symbolism occurs only after economic domestication. With gradual indigenous domestication clear and complete, Hodder argues that economic domestication is associated with or preceded by social and symbolic domestication.²⁷

Sedantism and agrarian intensification eventually transformed prior organizations of social life. Over time, the multiplicity of social relations required by foraging were increasingly channeled through the kin-based household. In this way, Hodder argues, the sedentary agrarian household became the mechanism for providing the productive means on which social relations depend, from feasts and gifts to collective work and common defense. Patterns of power and control within the household worked to constrain personal relations in the larger social unit. Even more important, however, was the way this

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²⁷ Hodder, *Domestication of Europe*, 31-35; F. Hole, "A Reassessment of the Neolithic Revolution," *Paléorient* 10 (1984): 49-60. See also J. Cauvin and M-C. Cauvin, "The Origins of Agriculture in the Levant," in C. Young, T. Smith and Mortensen, eds., *The Hilly Flanks* (Chicago, 1982).

process implicated individuals in relations of long-term dependency in fundamentally new ways. The temporal delay of agrarian returns inevitably enmeshed individuals within wider social and economic structure, providing the mechanisms for increased social control and the regulation of everyday life associated with planned villages. The adoption of intensive methods of cultivation served the interests of elite members of the social group by ensnaring people within structures of dependency. The symbolic opposition of nature and culture, life and death, created the social form *society* through the binary relation of domestic and wild, then, just as the practical process of domestication inaugurated real dependencies between units by which individual domestic units were "settled" into villages – that is, domesticated.²⁸

Habit and Habitation

Sometime Between 10,300 and 8,500 B.C. a social revolution was well underway across the world. With the rapid emergence of complex stratified societies, some began hoarding resources rather than sharing them with group members, acting out of self-interest rather than altruism. Traditional arguments for agrarian intensification often describe them as adaptations to demographic pressures and the rise of economic change. As Ian Hodder notes, however, adaptation alone is insufficient to explain why group size increased and the paths toward intensification chosen; changes in the symbolic order were also required. In this sense, economic changes – including the emphasis on bringing wild plants and animals into the sphere of settlement – are themselves part of changing sociosymbolic strategies associated with domestication. According to Hodder, a "subsistence economy, including the hunting of wild food, is more than economic. It also plays social

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²⁸ Hodder, *Domestication of Europe*, 39-42.

and symbolic roles that are integrated with subsistence considerations." In this way, the shift to agriculture was not simply a transition from one way of getting food to another. As nature becomes more regimented and standardized under domestication, the same thing happens to people who work to cultivate nature.²⁹

One consequence of the shift to more intensive subsistence strategies was a shift in cultural prestige from the wild to the home. The emphasis on cultured plants and animals initiates the existence of a separate domain, distant from active participation in the hunt, and more concerned with storing, processing, planting, weeding and caring and protecting. As key resources shift in the late Pleistocene, in order to maintain relations of domination changes in the social relations of production were required. In this sense, the process of sedantism and agrarian intensification is another aspect of the mechanism by which wild resources were cultured and transformed. A key concern became to "domesticate" people within the settlement, or to "settle" them domestically, which occurred through conceptual, social and economic structures. Death is brought inside to foreground the dangers of nature and allow discipline and order to be created. Likewise, the wild was also brought inside and controlled as a way to create social order. In this way, the "origins of agriculture" is both a metaphor for domesticating society, and a mechanism for creating dependencies among people in the practice of cultivation.

As a more intensive, delayed-return strategy is increasingly adopted, individuals become economically ensuared just as they were symbolically domesticated. For Hodder, the transformation of human social life at the end of the Pleistocene is thus somewhat predictable given the cultural logic of late Paleolithic social prestige. Although the consequences of a particular social strategy may have been unforeseen and unintended,

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²⁹ Hodder, *The Domestication of Europe*, 39-42.

sedantism and agriculture are entirely unremarkable given the structural tendencies and particular conditions within which they developed. The transition to agriculture, in other words, was necessarily experienced within a previously developed socio-cultural order. Domestication, in short, was always elaborated within a previous framework in which culture was already articulated in terms of nature.³⁰

To theorize the wider set of activities related to the household and its economy of necessity, Hodder develops the concept of *domus* as the metaphorical matrix in which the transition to agriculture was thought about and experienced. In this sense, the *domus* increasingly became the central concept for mediating the various experiences of nature and culture, wilderness and society. Beyond the household, in fact, there is little evidence for the extension or extrapolation of cultural production – for example, ritual authority beyond the sexual division of labor entailed by foraging. Instead, the household forms the central node through which new forms of social control are generated by prior forms of self-control within the domestic unit. Individual self-control, in short, constitutes the basis on which social control is extended beyond the household. As social relations extend beyond the family, each household referred to others as the cultural control of the wild within each home facilitated the creation of yet another larger social whole. For Hodder, this wider social unit "had its roots in the internalized desire for the control of individualistic, unsocial, wild behavior," which the *domus* provided through its structural oppositions of nature and culture. As metaphor, the *domus* generated the mechanisms for social domestication through enabled symbolic control of the wild on the one hand, and practical control of the plants and animals linked to economic domestication on the other.

³⁰ B. Bender, "Gather-Hunter to Farmer," World Archaeology (1978): 204-222.

By contrast, Hodder traces two contraries of *domus* in Indo-European languages, namely, foris and agrios. While foris appears as the main opposition to domus in much of southeast Europe, agrios is the prevailing contrary in most of north and west Europe. Latin reflects the distinctions as well: *domi*, at home, and *foris*, outside; the Latin *fores*, or door, has Indo-European roots linked to the Greek *thura*, from which the English *door* derives; in fact, in Latin, foranus, foresticus, and forestis all refer to the outside, extraneous world; in Italian forestiere means foreign, while the English term foreign stems from foris, as does forum, Latin for an outdoor, public place of business. All these concepts – forest, foreign, wild, public – are defined with respect to the house and its threshold or doorway. Concept and thing, domus links the feminine symbols of birth, nurture and care – or, women and children, the provision of food, storage, cooking – to the masculine symbols of warring, exchange, prestige, hunting and death. By contrast, foris denotes boundaries and limits, emphasizing the structures of signification that link forest, foreign, forum, and door. While the domus-foris opposition is initially concentrated on the house, over time it expands to include and order the larger settlement space, resulting in both expansion of the social group and a demarcation of its boundaries. In this sense, Hodder argues, the concept *community* was created by the opposition of *domus* and *foris*.

On the other hand, the *domus* is also opposed to the field, or *ager*, from which the Latin *peregrinus*, or stranger, derives. The English term *pilgrim*, or one who journeys far, a wayfarer, especially in a foreign land, is noteworthy. There are other Indo-European languages in which the terms *field* and *outside* are etymologically related: the Greek adjective derived from *agros*, or field, is *agrios*, which means wild or savage; this whole

family of words includes *acre* and *agent*, is likely formed from the Indo-European stem ag-, which means to drive, do or act. Yet, the primary relevance of agrios is its intersection with agri-culture, or a new way of culturing the wild. In this sense, the origins or agriculture are tied to the *domus-agrios* opposition, and the more general process of social domestication involving new types of social organization and control. At the same time, reference to agriculture links field, outside and wild to emphasize that, while the house may be the symbolic focus of *domus*, domestication occurred in the wilderness beyond, outside the home, as well. The *domus* is thus fixed, permanent, visible, present; it brooks little individual variation. There is a repetition or iteration about the domestic unit which leads to a strong sense of equality and community. The agrics, on the other hand, is initially absent, less visible; it involves exchange and hierarchy, competition and individual display. It is closer to the wild, yet to understand it is to reject this static image altogether, for their relations and intersections inevitably change over time and place. Hodder proposes these terms are a way to undermine contemporary blindness to the weight of words, and thus engage in deep critique. For Hodder, because the *domus-agrios-foris* is organized by oppositional principles and patterned in coherent ways, cultural evolution appears patterned in social action. In this sense, between these metaphorical relations, the basic idea of creating society through the domestication of the wild emerges. So, while the *domus* is central early on, as the concept extends as a social metaphor to incorporate ever more of the wild, the agrios becomes increasingly central.³¹

During the agricultural transition, the household appears as the primary unit of production as signs of social control emerge inside the home and out. Evidence for the

³¹ Hodder, *Domestication of Europe*, 165, 270, 176-177, 84, 86-87; E. Benveniste, *Indo-European Language and Society* (London, 1973), 256-257.

processing of wild plants increases significantly. The wild is brought into the domestic sphere and controlled. Houses were paved, painted and decorated, divided functionally and symbolically over time, as death was carried inside settlements and homes. Prior to domestication, wild animals are brought inside to be controlled and tamed, as wild plants are brought in and worked up into cultural products. At some point all the towns in Mureybet – a settlement on the west banks of the Euphrates, in what is now northern Syria – were covered with plaster while the first depictions of cattle and cattle horns adorn many domestic walls. These cattle are still morphologically wild, suggesting that cattle were domesticated first symbolically, brought into the home and ritualized by the existence of a "cattle cult." Small carved figurines – mostly female – increase in number and complexity, with widespread horticulture and husbandry not fully replacing hunting and gathering until sometime in the sixth millennium. Cereals were still closer to the wild, yet evidence for amplified concern about food control is found in stone bowls and dishes with increasingly intricate decorative molding, and while the level of craftsmanship varies, it nevertheless indicates a clear interest in transforming raw or "wild" clay into a domesticated or "cultured" artifact well before the main development of ceramics in the sixth millennium.³²

Death, too, is brought inside, with Natufians burying their dead within the home and settlement. Until around 6000 B.C. in the Levant – and somewhat later at Čatal Hüyük and Lepenski Vir – the dead are buried under the house and alluded to in the domestic sphere by paintings and busts; in the Levant, however, during the late Neolithic

³² Hodder, *Domestication of* Europe, 36-39; for more, see J. Cauvin, in *Archaeological Reports from the Tabqa Dam Project – Euphrates Valley, Syria*, D. Freedman, ed. (Annual of the American Schools of Oriental Research, No. 44, 1979); A. Moore, "The Development of Neolithic Societies in the Near East," in F. Wendorf and A. Close, eds., *Advances in World Archaeology*, 4th ed. (1985), 1-69; on villages, see D. Oates and J. Oates, *The Rise of Civilization* (Oxford, 1976).

burials are increasingly moved outside the settlement altogether. This contrasts with the practice of hunter gatherers, who bury or dispose of their dead outside the settlement and naturally must leave them behind when they move on to a new one. Some skeletons are adorned with bracelets, belts and necklaces, through which death is culturally controlled and domesticated. The social significance of the *domus* continues into the early eighth millennium, during which time the use of mud bricks and urban stone fortifications appear. Together with slight evidence for fully domesticated plants and animals, for Hodder the primary forces of domestication were social and symbolic, with economic forces playing a central but not dominant role.

As this process of domestication spread, humans were, in a sense, domesticated by the circumstances through which they lived, as the consequence of a particular social and cultural strategy of subsistence. This extension was not "simple," of course, nor were its results equivalent in all times and places; the "culturing" of stone tools, the encoding of wild animals by "art," and the "culturing" of death in burial are not equivalent to the agrarian domestications. The social and symbolic order of the agricultural domestications – ordering, controlling, storing plants and the closer management of certain animals – led to closer dependencies of plants and animals on humans and humans on those plants and animals. The separation of plants and animals from wild populations led to genetic changes, and to maintain or increase productive levels on the basis of such resources, fields had to be cleared, fences built, fodder and seed stored. Humans thus became involved in longer-term commitments and dependencies not only with one another, but with other species of plants and animals.

In this way, and despite the difficulties with defining domestication, it is clear the origins of agriculture occur within a symbolic economy oriented around the household and focused on death. While early domestication involves the symbolic intersection of home and death, as the process intensifies, death is distanced from the settlement and home. With the introduction of pottery and its increasingly intricate decorations, the home ceases to be painted and fewer lithic artifacts appear, which suggests a decline in hunting and an increased importance of horticulture and husbandry. That said, for Hodder it is important to underscore there were always a variety of options to avoid sedentary life, including decreasing population densities with migration, dispersal, infanticide and other prophylactic methods. As social groups increasingly aggregate and become sedentary in the late Pleistocene and early Holocene in the Near East, then, the flexible and immediate needs of the small unit were subsumed to the needs and desires of the larger whole. Again, it was not because of a lack of food or resources. It is safe to assume that the incipient household of late Pleistocene hunter-gathers was a place of safety, warmth, comfort, the focus of early childhood and the center of domestic life.

From very early, death was fully imbricated in the symbolic order. The earliest burials are of Neanderthals in southwest France and Mt. Carmel in Palestine, while upper Paleolithic graves contain adorned bodies laden with mammoth tusks, spears and tools. Before about 3300 B.C., the symbolic control of boundaries and space centered on the settlement. Burials were ordered in cemeteries similar to the ordering of houses. After 3300 in central Europe, the *domus* was extended to death in a well-documented way. Houses are small, and enclosed settlements often become more substantial. Overall settlement and economic practices alter, and the importance of warring and hunting

gradually increases, along with the importance of megaliths. The common experiences of fear and death are thus always already enveloped in cultural meaning, and much the same is true with fire and cooking. The very existence of hearths in caves and early settlements involves localization and formalization in the use of fire as a cultural artifact. This ordering and control transforms natural resources into cultural products by way of cooking with fire. The prestige of the cultural and social order is thus created from wild or "natural" elements, which must be transformed to become meaningful elements of culture. Cave paintings are evidence for hunter-gatherer views on the relation between culture and nature. Much of the wall painting is found deep within caves, away from occupation areas. In the cave paintings, the "wild" is being categorized and controlled, while at the same time the prestige associated with the control of the wild is celebrated. Hodder suggests the construction of the cultural in relation to the wild derives from a single process – the creation of social and cultural prestige through the separation and control of the wild, which was given different expressions in different times and places. The prestige of the hunt was thus both created and symbolized as key site of value within a larger cultural lexicon; prestige, in short, was created through dominating the wild.³³

The domestication of plants and animals thus first entailed the symbolic domestication of humans. Using an array of prehistoric evidence, Hodder argues the home was the central social metaphor of the domestication process, evoking a desire for security and certainty, educating certain human habits of necessity and contingency, through the structural and cultural opposition of nature and wilderness. At least by the Natufian, he argues, the home was both the primary unit of economic production and the

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³³ Hodder, *Domestication of Europe*, 130, 132, 138, 141-143, 285-286; Champion *et al.*, *Prehistoric Europe*, 90-91; on megaliths, see Hodder, *Domestication of Europe*, ch. 7.

primary means of social reproduction; at once an economic and conceptual unit, the home was opposed to the wild, dangerous and asocial. Individual feelings about the dead were controlled within the home, secured under floors or cultured in pits, likely inspiring a certain drama linking primal fears to deep loves; indeed, for Hodder the home formalized an internal and external drama, sheltering inhabitants yet simultaneously providing a public façade around which symbolic norms were iterated and ritualized. At the intersections of economic production and social reproduction the cultural desire for sedantism and intensification was channeled. Because structures of power are linked to structures of signification, power is transmitted across generations in the household and its economy of contingent necessity. On the one hand, the household is the site of individual production and reproduction; it is the place of birth, education, family and death, thus providing a basis for congruency between individual relations and the interests of the social whole. On the other hand, the household creates the space in which domestication itself becomes a metaphor for society and social relations. In this way, the domus is not only a central metaphor for social domestication through larger social units, it is the mechanism of this change as well. Metaphor and mechanism, the *domus* functioned as the condition of possibility for agricultural transition. As metaphor, it used existing fears to create the possibility within experience for legitimizing structural changes of sedantism; as mechanism the *domus* is the locus of production and reproduction within which social relations acquire meaning.

In this sense, agriculture was not inevitable, but turned on contingent symbolic responses of particular human groups at specific moments in their biosocial development.

Critically, however, the contingency of this process in no way precludes an agential

register, for clearly some moment of desire is implicated in the *domus* dynamic. For Hodder, the *domus* aroused key emotions, ideas, associations and fears, whose symbolic interplay organized the domestic drama of human life, in turn creating the social will to control the wild and transform culture into nature. Through this drama the will to sedantism and agrarian intensification created the social whole through the experience of cultural domestication in (always already socialized) individual selves. The *domus* is less a thing than a conceptual comportment or metaphorical register for experiencing social life; yet it is also the source of desire, the space in which desire is educated *as* desire.

Theory and practice combined, in this sense *domus* is perhaps the first fullyarticulated human *praxis*. It implied an increased use of plants and animals removed from
a natural state by human labor; it implied social interdependence over time with delayed
return on labor and investment; it implied the need for social control and constraints on
individual action to erect villages, common defenses and trans-familial cemeteries. Social
control in this metaphorical mechanism flowed in both directions; its rationale was
dispersed across the framework itself, within the overall metaphor of domestication and
taming. From the very start, then, the use of *domus* was linked to constraint and a
common social order to be imposed on individual units of production. As constraint
increased, the *agrios* as an alternative mechanism and metaphor of power emerged.

Agrios as the domestication metaphor was referred to by human skulls placed underneath
floors, axes with decorated boxes; over and against the wild, savage, strange, foreign
agrios, the domus provided the conceptual framework for the caring and nurturing
through which larger communities are actually built. As communities dispersed into a

wider range of environments to use a wider range of recourses, settlement was in one way simply the extension of *domus* to taming the wilderness.

In this sense, the origins of agriculture reach back into economic processes and social relations deep in the Paleolithic, and to particular climatic and social events at the end of the last glaciation. Ultimately, domestication was the metaphorical, pragmatic creation of docile bodies within larger productive units. The separation of the wild from the domestic, the creation of clear boundaries in relation to the *domus*, was the primary process by which local groups competed and maintained strategies and mechanisms of domination. This juxtaposition enhances the prestige of the cultural order over and against the agrios; it identifies the metaphor of domestication as the main mechanism of social control. The house, hearth and pot were deployed in the culturing process, in time becoming appropriate metaphors for the domestication of society. In some areas, such as southeastern Europe and the Near East, caring and nurturing were emphasized, while aspects of the female body were symbolically appropriated; in other areas such as central and northwest Europe, the intervention into and exclusion of the wild was stressed. As this metaphor and practice continued to be used to domesticate and dominate society, the culturally ordered domestic world was increasingly elaborated as the separate sphere of the agrios. As social units expanded and gained in cohesion, the domestication metaphor became the discourse for inter-group relations: going in and coming out, exchanging food for other basic necessities. With domestication, the wild transformed into metaphors for the development of larger social units. Culture and society oppose nature and the individual, and the household stands in for culture in a form of mnemonic logic. The control of death and the wild in the home is deployed to transcribe general social norms

into practices within individual households; the priority of the community is asserted above the individual. The relationship between individual bodies and the more permanent social role they fulfill emerges into sharp relief, disrupting habits of authority.³⁴

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³⁴ Hodder, *Domestication of Europe*, 36-39.

CHAPTER III

AGRICULTURE AND ENSLAVEMENT

Along with China, the first stable human food surpluses were cultivated in Sumer, nestled on the lower Euphrates in southern Mesopotamia. Growing barley, erecting the first city, and writing the *Epic of Gilgamesh*, Sumerians were the first to appropriate land as private property as well. The majority of Sumerians did not own land, of course; most was held by religious and military leaders. Sumerian elites built their wealth with high-interest loans, administered by a bureaucratic apparatus that managed to build the first state in the world on the backs of the first landless serfs in history. Certain aspects began earlier, and elsewhere, but Sumerians develop the arts of government – record-keeping, weight and measurement standards, leasing land at interest, public financing of temples and irrigation – to such a degree as to form the starting point for all subsequent states.

Humans have lived in Mesopotamia from at least 7000 B.C., with the earliest evidence for permanent settlement just west of Ur, at the tell of al-'Ubaid in present-day Iraq. In the fifth millennium clear signs of urbanization appear with concentrated settlements, multi-roomed mud-brick homes and public temples. By 5300 B.C. a distinct division of labor emerges as intensive farmers, nomadic pastoralists and hunter-fishers of the Arabian littoral compete for dwindling resources. Sumerian civilization was carved from alluvial Mesopotamia by a network of dikes and canals managed by an aristocratic oligarchy based in the central city of Uruk some 5,700 years ago. Around 3,700 B.C, state-level societies emerge on the southern Mesopotamian valley. These earliest states begin amid sedentary, chiefly societies provoked to conflict by territorial disputes and

forced resettlement, as larger groups dominated smaller neighbors. By 3000 B.C. Uruk is home to some 50,000 people, at its time the largest settlement in the world. Political and economic power in Uruk was based on its concentration of people and grain. Uruk was also located at the confluence of three trade routes linking the Mesopotamian world: one went to Syria, Anatolia to the north and northwest; one went east to the Iranian plateau; and one south to the Persian Gulf and Africa. At the height of Mesopotamian power around 1800 B.C., various Sumerian cities coalesce as the Babylonian empire, marked by high levels of inequality among nobles, priests, peasants and slaves.¹

Across the world, similar circumstances give rise to early kingdoms. Stateformation at Uruk was not based on local conflict alone, however; precipitous population
increase suggests mass immigration and natural reproduction were factors, for as
thousands flee the Susiana plain, the populations of Uruk and southern Mesopotamia rise.
And so while military and economic elites ruled these cities with a great attention to
detail, they nevertheless generally welcomed refugees and immigrants regardless of
origin, for an increased population meant an increase labor pool available to the state.²

Around 2,700 B.C., five urban areas sufficiently large to rival Uruk began to coalesce in southern Mesopotamia. The southwest Iranian version of the Mesopotamian plain, the Susiana plain had two key differences. Formed by outwash fans of the Zagros Mountains, not only does gravel underlay the Susiana – reducing salinization and water logging – more rain falls annually than in Mesopotamia. On its western edge some 6,400 years ago, the agrarian settlement at Chogha Mish grew wheat, barley, oats, peas, lentils

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¹ Flannery and Marcus, *The Creation of Inequality*, 458, 450-451, 460-463, 475, 500-501.

² In general, see R. Adams, *Land Behind Baghdad*; Adams and Nissen, *The Uruk Countryside*; Adams, *Heartland of Cities*, *The Bulletin on Sumerian Agriculture* (v.1-7; 1984-1993); D. Oates and J. Oates, "Early Irrigation Agriculture in Mesopotamia," *Problems in Economic and Social Archaeology*, G. Sieveking, I. Longworth, and K. Wilson, eds. (Oxford, 1976).

and flax; they gathered pistachios and caper fruits, and clover as fodder for sheep, goats and cattle. Artifacts suggest a variety of social ranks. As urban settlements increasingly come into conflict, the chiefly center of Susa conquered Chogha Mish, and with twenty satellite villages expanded to nearly forty acres. As the number of villages declined, the populations of those remaining expanded. Although new settlements did emerge, their infrequency and lack of success reflects the need to concentrate people in larger settlements to defend against raiding.³

As people are consolidated into large social units, intimate communities become marked by anonymity, while early temples functioned as a site for the production of cultural uniformity. Between prehistory and history – from 3500 to 2800 B.C. – military elites emerge beside temple elites, quickly making themselves an independent social strata. First, local strong men become village chiefs, gradually assuming authority over common land and livestock held by temples; later, the strongest declared themselves kings and begin usurping temple power and property. After centuries of war, a number of city-states unite into kingdoms or archaic states. Amid violence at the periphery, large numbers of rural subsistence householders sought refuge in cities; this risk was so great, in fact, Uruk built a six-mile defensive wall, surrounding the city with regular towers and two well-defended gates. The result of risk was to aggregate the population into larger, easily defendable units, which depopulated the countryside. While some fled because of a vulnerability to violence, others moved to urban centers due to political or military turmoil. Skilled laborers or craftsmen frequently found work in burgeoning towns and cities, while those with no skill found themselves cultivating fields in a sharecropping

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³ H. Wright and G. Johnson, "Population, Exchange, and Early State Formation in Southwestern Iran," *American Anthropologist* 77:2 (1975): 267-289; Adams, *Heartland of the Cities* (Chicago, 1981), ch. 1.

system with temples and large landlords. Still others subsisted by manual labor, usually for daily rations of barley and beer.⁴

The urban revolution is traditionally marked by three phases: the rise of templetowns, the expansion of city-states, and the coalescence of nation-states. In the fourth and third millennium B.C. the first Mesopotamian temple-towns attracted huge populations seeking food and protection during war and famine. In turn, these formed the pool of labor for large-scale state projects, including digging irrigation canals and constructing temples. Even in Neolithic towns of considerable size such as Čatal Hüyük and Hacilar in southwest Anatolia in the sixth and eighth millennia, evidence for significant differences in wealth and status, as well as craft specialization and long-distance trade, suggest a high level of economic development. Yet sometime prior to 5000 B.C. these villages are abandoned, conquered or otherwise vanish from the record, while similar villages emerge in southern Mesopotamia.⁵

A result was the formation of the state, identified by a political hierarchy, state temples, official secular buildings and a monumental capital. The earliest states were in the ancient Near East, and southern Mesopotamia in particular. While this region is commonly known as "the cradle of civilization," states were forming in northern Mesopotamia and southwest Iran at the same time; with three such "cradles" in the ancient Near East, Kent Flannery and Joyce Marcus suggest the region is "the nursery of civilization," for they were all highly interconnected through exchange, migration and war. In what they term "chain-reaction state formation," once archaic states began to

⁴ Flannery and Marcus, *Creation of Inequality*, 453, 473, 459; R. Adams, "Agriculture and Urban Life in Early Southwestern Iran," *Science* 136 (1962): 109-122; for more, see R. Adams, *Land Behind Baghdad* (Chicago, 1965); Adams and H. Nissen, *The Uruk Countryside* (Chicago, 1972).

⁵ A. Johnson and T. Earle, *The Evolution of Human Societies* (Stanford, 2000), 304-306.

expand— causing populations to concentrate in defensible cities—neighbors were compelled to do the same lest they lose independence. The traditional focus on Uruk is thus an oversimplification; Mesopotamian society is the result of dynamic competition and alliance-formation among several highly-developed urban societies. Although determining the exact date of state-formation is difficult, the first states coalesce around 5,000 years ago in the Near East. Like kingdoms, imperialism and empire are probably not more than 4,300 years old. With empires came the escalation of ethnocentric habits, which in time became fully-developed ethnic ideas, as races of men war with one another over natural resources and social power.⁶

If self-preservation and self-reproduction are central to human life, the advent of writing in Mesopotamia around 3100 B.C. certainly marks a watershed moment in the history of the species. Around religious temples and courts, ruling elites quickly appropriated these symbolic systems to augment and justify the various system of political power. That stratified society emerged from a preexisting context in which all men dominated all women to one in which some men dominated other men as well, merely indicates how effective symbolic systems were to the further marginalization of specific groups of people. In this chapter I examine the intersections of large-scale, monocropped agriculture and the rise of the stratified political organization of the state. In the first section, "Surplus and Stratification," I examine the administrative apparatus that developed around the early Sumerian state through its centralized management of the surplus. In the second section, "Grain and Governmentality," I analyze the intersection of large-scale monocrop agriculture with the In the third section, "Plow and War," I trace

⁶ M. Fried, "On the Evolution of Social Stratification and the State," in S. Diamond, ed., *Culture and History* (New York, 1960), 713-731; Flannery and Marcus, *Creation of Inequality*, 452, 448.

the relationship of violence and plow-based agriculture, especially with regard to the gendered division of labor. In the final section, "Monoculture and Monotheism," I examine the ideological function of early female Mesopotamian deities and their relationship to wilderness and civilization. My aim in this chapter is to connect the transition to agriculture with the rise of urbanism on the one hand, and the development of institutionalized forms of slavery on the other.⁷

Surplus and Stratification

Technical advances in agriculture led to the "rise of civilization," or the process by which seasonal villages became the permanent, densely-settled social units known as cities, then states. These complex societies resulted in, and relied upon, social stratification, as most food surpluses and other goods were produced by coerced workers, often slaves. The transition to entrenched social stratification occurred at different times in different places – first in the riverine valleys of China, Mesopotamia, Egypt, India and Mesoamerica, then in Africa, Europe and Malaysia – but in each case first-generation states are inextricably linked to specific forms of extensive, irrigated agriculture. In fact, the classic Old World civilizations were all erected on the great alluvial plains of the world between 5,500 and 3,800 years ago deploying complex, irrigated agrarian states as the novel means by which to govern newly accumulated populations of people. Irrigated agriculture was not simply a way to grow more food, then, but to govern more people as well.⁸

⁷ E. Fromm, *The Heart of Man* (New York, 1964), 116-117, 32; E. Becker, *The Denial of Death* (New York, 1973), 26; Lerner, *Creation of Patriarchy*, 200.

⁸ Flannery and Marcus, *Creation of Inequality*, 555; K. Wittfogel, *Oriental Despotism*, 18; F. Engels, *The Origin of the Family, Private Property and the State* (New York, 2010 [1884]), 51-57.

Apart from the reductive ends to which this "hydraulic hypothesis" is placed, it is clear that state-formation in Mesopotamia connected to hydrology, which divided the region into three agroecological zones: the south based on perennial irrigation, the west based on natural irrigation, and the north where "dry farming" and mixed husbandry prevailed. In areas where rainfall was sufficient such as Syro-Palestine and northern Mesopotamia, dry farming was watered by rain alone, while in places like Egypt natural flood cycles gave the water required for cultivation; large-scale irrigated agriculture was typical only in south Mesopotamia. The riverine behaviors of each region played a key role. While floods of the Nile were slow, steady and predictable, those of the Tigris-Euphrates were much more erratic, fed by storms and snowmelt from mountains to the north, coming at the worst time for farmers, when fields were full of crops ready for harvest. Yet water in the growing season was in generally short supply, thus making its provision a vital issue for leaders of every rank and among the greatest triumphs claimed by kings. The first attempts to control the water supply, interestingly, lie outside the great floodplains of Mesopotamia, for before 5000 B.C. the means for artificial watering were already widespread on the alluvial fans and waterways to the north as a supplement to rain-fed agriculture. In this way, a highly-productive agriculture – itself requiring political stability – was necessary prior to the colonization of southern Mesopotamia and the rise of the great urban centers in the fourth millennium.

Water availability thus affected each regional economy, creating reliable surplus with irrigation as a prerequisite for stable government. As a result, each zone was socially and politically distinct; while this diversity worked to mitigate economic competition

⁹ In general, see W. Butzer, *Early Hydraulic Civilization in Egypt* (1976); on dry-farming, see O. Borowski, *Agriculture in Iron Age Israel* (1987); H. Weiss, ed. *The Origins of Cities in Dry-Farming Syria and Mesopotamia in the Third Millennium* (1986).

between regions, it led to political and military conflict over time. Everywhere, however, barley was the primary crop, providing grain for bread and mash for beer, among other uses. Emmer and wheat were grown in dry areas of north Assyria and Egypt, but true wheat was relatively rare and a luxury. In wet areas flax, beans, lentils, chickpeas and fenugreek were grown, and everywhere vegetables were grown as garden crops on a small scale, watered by hand. A great deal of agroecological variation, then, led a wide array of agrarian political economies.¹⁰

Despite differences in crops, methods and divisions of labor, the transition from a rain-watered agriculture to one irrigated with centralized canals and administrative stratification marks the advent of state-level political units. Evidence indicates each development of irrigation was a response – or at least related – to the global decline in rainfall after the mid-Holocene optimum. Once initiated, irrigation enabled a smaller amount of land to produce more food and so support more people; the result was to encourage higher population densities. Because urban expansion and demographic growth have a strong influence on subsistence strategies – encouraging more output per unit of land – agrarian social relations increasingly fall in the purview of political and economic elites. Because elites control the capital required for agricultural intensification, the trajectory of development often follows their interests. As people are removed from the direct means of subsistence, an economic niche emerges from the new need to obtain food in other ways. In this way, rising populations are possible only by raising food production or expanding the territory from which the population is sustained; the former tends to cause social stratification, the latter militarism. With improved technology in

¹⁰ For different views, cf. M. Powell, "Salt, Seed and Yields in Sumerian Agriculture"; K. Baer, "The Low Price of Land in Ancient Egypt," *Journal of the American Research Center in Egypt* 1 (1962) and "An Eleventh Dynasty Farmer's Letters to His Family," in *Journal of the American Oriental Society* 83 (1963).

growing crops, settlements grew denser, ultimately becoming cities with a relatively high level of socioeconomic stratification – a social system with divisions between ruler and rules, elites, artisans, peasants and slaves.¹¹

In this way, Sumerian surplus created marked economic disparities in a state where landed elites dominated landless peasants. High concentrations of land ownership and debt slavery (or the enslavement by creditors of debtors who are unable to repay a loan) was common to hereditary rank societies, and only intensified as land was removed from common cultivation and allotted to temples, creating a fully administrative agriculture. Initially sponsored by the state, temples were the center of social life and provided the means for organizing concentrations of souls and cereals; among its most important functions was to set the price of food and basic commodities. As the wealth and power of these palatial estates expanded, however, aristocrats increasingly used their basic institutional model to create private wealth and public power. According to Michael Hudson, in many ways the temples of Sumer prefigure how contemporary corporations undermine public power with private wealth. The wealth of palatial estates encouraged aristocrats to use interest-bearing loans to appropriate common land, while commoners used their freedom as collateral for land that was once cultivated independently.¹²

Administrative accuracy and consistency was vital to state power. Sumerian state revenue was based on two land surveys, the first before plowing and the second before harvest. On public threshing floors agents collected revenue in grain rather than money, leading to the rapid metrological relationship of grain land measurements. Surplus grain

¹¹ Ofek, Second Nature, 200; Boserup, Conditions of Agricultural Growth, 81; for more, see M. Cohen, The Food Crisis in Prehistory (New Haven, 1977); M. Harris, Cannibals and Kings (New York, 1977).

¹² C. Edens, "Dynamics of Trade in the Ancient Mesopotamian 'World System'," *American Anthropologist* 94:1 (1992); E. Fraser and A. Rimas, *Empires of Food* (New York, 2010), 105.

was then stored centrally and redistributed over the year. Annually the cost of farming included seed, plows and tools, as well as the purchase and upkeep of draft animals, which were both expensive to buy and keep; to work well oxen need high-quality fodder, typically fed barley while working, thus competing with food for people. Large-scale irrigation projects were communal work, organized by state and temple, conducted in the off-season. As bringing new land into arable condition was costly and slow to return a profit, for common farmers it was frequently better to cultivate a smaller parcel to avoid higher state assessment; the elite, however, found it more profitable to force farmers to work the largest fields possible to extract the highest assessment.¹³

In fact, across the Near East there was frequently more arable land than labor to cultivate it. The result was a landscape dotted with towns, villages and cities around which intensive cultivation was mixed with orchards, vineyards and gardens close to inhabited areas and grain fields on the periphery. As a rule, common farmers did not keep many poultry or fowl, and only a few goats or sheep. Far from self-sufficient, households depended on the surrounding landscape for complete subsistence, including the marshes, reed beds and scrub for food, fuel and raw materials. Venturing into the territory of the shepherd, fisher and fowler, early Sumerian farmers inevitably came into contact with those living off the land in ways far different from most Sumerians. This difference was made all the more striking by the fact that draft animals were frequently pastured in the swamp and scrub wastes – brought into the fields only to plow, graze or tread grain – thus

¹³ Bogucki, "Animal Traction and Household Economies in Neolithic Europe," *Antiquity* 67 (1993): 498.

creating complex, often fraught social tensions. Competition by oxen with game, for example, would almost certainly generate dispute between farmers and nearby hunters.¹⁴

By the early fourth millennium, Near Eastern agriculture had gained tremendous momentum. Traditional explanations emphasize economic intensification as the central factor in early state formation, but recent work makes clear that agrarian extensification was vital to financing Near Eastern civilization throughout the third millennium B.C. The high labor needs of plowing and sowing made labor the limiting factor in agriculture, and resulted in a conflict of interest between landowners and farmers. Older farming methods survived, even as the plow, cereal monoculture and intensive farming brought important changes in places where they appeared. Not only were oxen and large estates concentrated near key urban centers – thus linking palatial cultivation to animal traction – but records of grain harvests there are limited to one grain, indicating a prevalence of extensive monoculture rather than intensive polycultures. In this way, much of the population did practice intensive, multi-cropped horticulture, but palaces were the centers of surplus grain produced on large estates, extensively cultivated with oxen. The overwhelming concern on one cereal grain suggests administrative involvement in extensive cultivation. So while the literature of Sumer associates the plow with gods and kings in an elite extensive agriculture, other texts indicate the hoe remained more generally important to Sumerian society. In this regard it is important to note an overwhelming majority of the written sources reflect concerns of the landowners for whom they were composed. While legal codes do offer insight into wider agrarian politics, most provide precious little detail into matters of everyday concern. One notable

¹⁴ T. Bayliss-Smith, *The Ecology of Agricultural Systems* (Cambridge, 1982), 107-108; P. Halstead, "Traditional and Ancient Rural Economy in Mediterranean Europe," *Journal of Hellenic Studies* 107 (1987): 77-87.

exception is the so-called Sumerian *Farmers' Almanac*. The best source on the agrarian methods and ideologies of the time, in this text a farmer instructs his son on the order of grain farming across the seasons.¹⁵

The most complete evidence comes from temple estate records on cultivation and revenue, where sub-elite rural landowners seem to be the most critical to controlling land and commanding labor. Though the balance of institutional and individual cultivation varied, overall it appears the entire countryside was subordinated to urban temple and state elites. As such, the farmers of most Sumerian documents are various classes of the rural sub-elite, landowners responsible for working the land; rather than centralized administration, then, these landowners had the most direct influence on land and labor. The success of early agrarian states, that is, also required efficient delegation of power at the local level. This intermediate level of bureaucracy was directly responsible for collecting state revenue, conveying it to the political center through village leaders, and directing farmers, bailiffs, stewards and scribes who comprised this crucial aspect of state management. While this strata might also farm, they were primarily responsible for overseeing field workers and keeping the land cultivated to keep revenue steadily flowing into the state treasury. Below this group were a range of subordinate workers and slaves – "hirelings" in Sumerian sources – who were not only exploited but unable to reap what they sowed, for each level of the social hierarchy – from workers to tax farmers to state agents to the king, and finally to the gods – took shares of the crop. Absent this apparatus there was neither the stimulus nor the security to produce a surplus because of the costs and risks associated with large-scale cereal agriculture. In this way, the stability of rural

¹⁵ H. Vanstiphout, "On the Sumerian disputation between the hoe and the plough," *Aula Orientalis* 2 (1984): 239-251, 242-243, 247.

Mesopotamia depended on authorities avoiding excessively high assessments, for when they transgressed these limits the rural economy collapsed, land fell out of cultivation and commoners fled their fields for greener pastures. If taxed too much, that is, farmers simply left the fields to find a less intensive means of subsistence.¹⁶

The well-documented Sumerian institutional estates of the late third millennium offer rare insight into what were among the largest, most efficient agricultural operations in the ancient Near East. The first seasonal plowing was done by teams of two or three men and four oxen; less intensive methods used fewer oxen or even donkeys. Little more than a wooden tip drug through the field to break the ground, early forms of plowshare such as the ard made cultivation slow and difficult, while the highest quality plows were tipped in metal. Because turning this human-led, animal-powered apparatus around required unhitching the entire team, fields often lay in long furrows bordered by shaded pasture land for men and beasts to rest. Fields also typically adjoined a watercourse for irrigation. Early irrigation was gravity-fed whenever possible, for hand- or well-drawn watering was affordable only for high-value crops like dates and grapes; vineyards and gardens require large initial capital investments and long periods of time for return, while gardening was from very early a specialty unto itself. The majority of Sumerians, then, were still engaged in the daily work of subsistence. Yet a difference was emerging, with some working for themselves at a small-scale, while increasingly large numbers began working on large estates where the intensity of labor was reaching new levels.¹⁷

¹⁶ Halstead, "Quantifying Sumerian Agriculture," Bulletin on Sumerian Agriculture 5 (1990): 187-195.

¹⁷ P. Halstead, "Agriculture in the Bronze Age Aegean," in B. Wells, ed., *Agriculture in Ancient Greece* (Stockholm, 1992), 105-116.

Temple and Tablet

Across the ancient Near East, the power to govern derived from techniques that led to improved productivity on the one hand, and increased dependence on the other. Rather than technical improvements alone, increasingly sophisticated techniques of government relied on institutionalized estates using managerial means to mobilize labor. Huge state-financed construction of temples and palaces indicate the ability to employ vast numbers of workers in an organized way. At once religious, economic and political, temples were the center of a range of activities and played an important role in consolidating power in the newly emerging cities. From 3000 B.C., large-scale projects were coordinated by the temples, including construction, maintenance and administration of irrigation networks; by financing construction, paying labor in food and investing surplus in production for export, temple power expanded with the specialization of bureaucratic administration. With temples controlling nearly all raw materials and trade, the development of agricultural and craft export fostered the rise of an elite social strata and the development of standardized information systems, including writing. ¹⁸

The first symbolic systems were tokens linked to trade and accounting. Fully-developed writing with formal grammatical elements emerges shortly after 3,000 B.C. in Sumer, and is typically understood to have originated from the temples and palaces as a vital technique by which elites expanded their capacity to rule. Writing created an official version of speech and a new set of haves and have-nots; the literate and the illiterate. The earliest artifacts of writing are Sumerian clay tablets listing rations, tributes and divine names. Soon schools begin training scribes to meet the needs of political and sacred knowledge, production and maintenance, while later archives institutionalize the

¹⁸ C. Redman, *The Rise of Civilization* (San Francisco, 1978), 229-236.

administrative functions of temple and palace. Leaving behind thousands of seals, impressions, *bullae*, tokens and beveled bowls, these early temple-states paid workers in mass-produced bowls filled with standardized daily rations of barley. Soon thereafter administrators began to create state records by impressing clay tablets with inscriptions and numbers. In this way, while often considered an instrument of human liberation and enlightenment, early writing worked to consolidate power by an elite over masses of dependent, landless workers.¹⁹

Obedience was a central value in Sumerian society, and the early incorporation of standardized written contracts only reinforced the importance of cuneiform tablet and text as the legitimate basis for state management of everyday life. By naming individuals in their duties and obligations vis-à-vis the state, contracts created a new environment for political legibility, or the ability of the state to identify and know its subjects in a new way. Soon other key tools of statecraft such as the population and household survey rise to prominence, forming the basis for subsequent conscription and taxation.²⁰

Other developments reinforced centralized cultivation. Agronomic knowledge and animal traction were controlled by institutional elites on vast farms plowed by oxen with slaves and other bonded laborers. In Babylonia, agriculture was already a monoculture of barely. Monoculture is a basic simplification imposed in the interest of easy management and economic return. Monocultures, as a rule, are more fragile and more vulnerable to the stress of disease and weather than polycultures. Polycropping is a clear way to spread risks and improve food security; each crop is embedded in a distinctive set of biosocial relations, with different members of the household likely to have different rights and

¹⁹ Lerner, Creation of Patriarchy, 65; B. Batto, Studies on Women at Mari (Baltimore, 1974), 8.

²⁰ Flannery and Marcus, Creation of Inequality, 454, 456.

responsibilities with respect to each crop. With a monocrop, each worker or member of the household must perform the same task at the same time, and the amount of time they must spend on repetitive tasks is much greater. The planting regime, in other words, is a reflection of social relations, ritual needs and culinary tastes. Monocrop agriculture thus serves as the first example of standardized labor, and with greater centralization of social life, work is transformed to benefit rulers rather than workers.²¹

The consequence of agrarian uniformity was cultural uniformity. Monoculture produces and reproduces uniformity at a number of biosocial levels, including social and sexual norms, diet and fertility rates, architecture and religion, and trade and exchange. Not only are farmers on roughly the same seasonal rhythms of production and harvest, their cultivation needs are also similar. A society elaborated around monoculture is easier to monitor, assess and tax than one shaped by agricultural diversity. In this way, James C. Scott argues, the social organization attendant large-scale cereal agriculture is ideal for potential state entrepreneurs: with a standard value for land, labor and crops, all relevant aspects of production are legible to the state and appropriable to its ends. Large-scale monocrop grain agriculture, in other words, is best understood politically as "the most convenient and typical means of concentrating population and foodstuffs." By rendering fields and farmers legible, this "state-accessible product" relies directly on the high price of goods travelling a great distance, and the cost of defending the land on which that subsistence is based.²²

In this way, the precise circumscription of state space was critical for early state entrepreneurs. For rulers to consolidate power, not only must they ensure agriculture was

²¹ J. Scott, *Seeing Like a State* (New Haven, 1998), 21, 273-282.

²² J. Scott, *The Art of Not Being Governed* (New Haven, 2009), 73-78, 65.

a single monocrop, but that it was performed on a sedentary basis rather than shifting basis. As Scott notes, without clearly defined geographical boundaries to limit power, expanding state space is difficult at best. Among the alternatives to centralized state agriculture is "swidden," or slash-and-burn agriculture. According to Scott, swiddening has been "anathema to all state-makers, traditional or modern," because it disperses the population, employs a diverse cropping system, and only periodically opens up new fields. In this way, between sedentary and shifting agriculture only farmers are eligible to be registered households in the state tax roles. Scott traces premodern state-formation to "manpower-poor, land-rich systems" on the one hand, and "land-poor, manpower rich systems" on the other. Power in premodern societies turns on military supremacy with concentrated manpower, which is possible only in the context of intensive sedentary agriculture. Early states thus emerge in a context of surplus land and labor. In this sense, the ideal subjects of premodern states are "densely packed cultivators of permanent grain fields who produce a considerable annual surplus." While this generally holds for inland, landlocked states for whom agriculture is the key source of wealth – compared to littoral, coastal states where commercial wealth is key – the significance of manpower is martial. Not only are large numbers of workers needed to extract wealth from the land on a largescale, after conquest land has little value apart from occupation and colonization; simply extracting money from locals is not enough.²³

For Scott, this "homely fact" is basic to any analysis of premodern politics. "Rather than wealth begetting power as it does in modern systems," he argues, "in premodern systems only power can guarantee property and wealth." Before the technological revolution in warfare, power was "largely a matter of how many men a

²³ Scott, The Art of Not Being Governed, 67-68, 85.

ruler could field; power, in other words, boiled down to manpower." In this way, the condition of possibility for early states was the concentration of bodies, and without slavery such a concentration is difficult at best. Instead of a specific type of labor regime, the concentration is key. To concentrate bodies requires a requisite concentration of food; if either people or food are too dispersed, collection and distribution are costly and difficult, and conscription nearly impossible. According to Scott, early states in fact did everything possible "to starve the population into grain farming and subjecthood by separating them from the open commons." In premodern southeast Asia slaves were by far the most important "cash crop" and commodity in what Scott terms the "padi states," none of which could flourish "except by slave-raiding on a substantial scale." As political power shifted from the ritually- and economically-focused temples to the aristocratic state, there was a respective shift to kin-based social units and the private concentrations of agrarian wealth using slaves for domestic and market production. Even as militarism provided a successful unifying force in the short-term, however, it also contained the germ of its destruction. Emerging from the needs of warfare, dynastic kings of the ancient Near East solidified their power precisely as that of the temple was receding. Along with this new secular ruling elite, new forms of internal and external domination emerge, for as more people gather for security behind city walls, increasing numbers of captive workers are imported from the conquest of neighboring cultures.²⁴

Of all the texts recovered from Uruk, fully eighty-five percent concerned land, laborers and their products. If tributes of grain and men, ration lists and harvest records were the central objects of concern in the earliest artifacts of writing, slaves were among its main subjects. References to slaves and slavery are present at the very beginning of

²⁴ Scott, *The Art of Not Being Governed*, 65, 71-72, 85-87.

written history. In the earliest proto-literate tablets, for example, the sign for 'slave girl' appears before "slave," a word deriving from the expression for a "foreign country." The first legal code, known as the Ur-Nammu, contains the first written reference to slavery, addressing the perennial issue of escaped slaves. Not only does slavery appear in the very first documents, then, but even at this early stage there are many characteristics of latter slaveries already present. The earliest known inventories of position (or role categories) within a particular society contain amazing lexical lists including terms for both males and female slaves – with the first known sale of a slave dating to 2300 B.C. – and the most numerous references are to captive foreigners. The Codex Ur-Nammu dates from the third dynasty of Ur, while the other early Codex Lipit-Ishtar dates to between 2000 and 1800 B.C. when perpetual war and political strife mark the shifting power dynamics between various towns and cities. And so, while writing often figures as the central technology of enlightenment – preserving and transmitting experience with what Jacques Derrida terms *mnemotechnique* to facilitate the ordering of present and future life from past experience – history provides absolutely nothing to support this view. In what was otherwise one of the most creative periods in human evolution, in fact, writing was a late and indirect result; its invention three to four thousand years ago came long after agriculture, the rise of cities and the development of arts, crafts, trade and seafaring. ²⁵

In terms of the Neolithic "creative explosion," then, the invention of writing and the advent of civilization inaugurates a period of stagnation, oppression and exploitation

²⁵ N. Kramer, *From the Tablets of Sumer* (Indian Hills, 1956), 47; R. Ellickson and C. Thorland, "Ancient Land Law," *Chicago-Kent Law Review* 71 (1995), 321-331; R. Westbrook, "Slave and Master in Ancient Near Eastern Law," *Chicago-Kent Law Review* 70 (1995), 1631; J. Goody, "Slavery in Time and Space," in *Asian and African Systems of Slavery*, J. Watson, ed. (Berkeley, 1980), 18-20; M. Larsen, "Literacy and Social Complexity," in *State and Society*, ed. J. Gledhill, B. Bender, and M. Larsen (London, 1988), 180; A. Oppenheim, *Ancient Mesopotamia*, rev. ed., E. Reiner, ed. (Chicago, 1964), 282; J. Derrida, *Of Grammatology*, rev. ed., G. Spivak, trans. (Baltimore, 1997 [1974]), 24.

for a vast majority of humans. Writing was not invented for creative ends, but to record the food surpluses and other goods that agriculture made possible. The only phenomena causally coincident to the introduction of writing are the emergence of cities, empires and the integration of huge numbers of people into hierarchical political systems. In this sense, Lévi-Strauss notes, rather than human enlightenment, writing in so many ways provided a powerful technology for human exploitation; writing is "necessary for the centralized, stratified state to reproduce itself," with the important consequence that "the primary function of written communication is to facilitate slavery." The relationship of writing to enslavement, then, intersects a new technology of "permanent" speech not unlike the new phenomenon of vast numbers of captives doing the same work day after day for the same person. Writing standardized, and codified language in the same way slavery standardized human beings into identical, fungible units. While speculative, it is not difficult to imagine writing as an ideological technique to justify enslavement through the act of inscription.²⁶

Plow and Sword

The central dynamic of archaic state-formation was militarism and war. When a large influx of conquered captives was joined with labor needs to build large public works and monuments, conditions were set for the increased use of enslaved labor. Slavery emerged in the earliest agrarian states amid rapid urban population growth, increased raiding, war and the enslavement of women and men. In a system where land near urban centers was concentrated in the hands of elites, enslavement was essential to ensuring a steady supply

²⁶ M. Schmandt-Besserat, "The Envelopes That Bear the First Writing," *Technology and Culture* 21:3 (1980): 357-385; C. Lévi-Strauss, *Tristes Tropiques*, J. and D. Weightman, trans. (New York, 1992 [1955]), 298-300.

of workers. Effective mechanisms to prevent people from dispersing across the landscape to live by less intensive forms of subsistence – for example, tribute and slavery – were also required, in addition to less obvious and less coercive means.

The plow was critical to the development of stratified society. Not only is it required to increase production, and so sustain larger non-agrarian populations, the plow necessarily involves more extensive land use, and so increases opportunities for uneven distribution. As the earliest form of plow, the ard represented an advance over the hoe; first appearing in the Near East around 4000 B.C., the ard cut a furrow through the soil without turning it over, a simple wooden blade little more than a point. Plowing with oxen was a significant agricultural intensification too; the effort required to free fields of obstacles like stones, trees and stumps, the investment of labor created a profound new incentive for farmers to stay on the land they worked from year to year. From this basic dynamic two strategies emerge: intensive manual cultivation with high yields and labor needs but low-levels of surplus, on the one hand; and extensive, irrigated plow cultivation with low-yields and labor needs but (potentially) high-levels of surplus, on the other. Surplus in the latter is based on the extent of land under cultivation, and increases insofar as the by-products of human crops are reintegrated as fodder for livestock and fertilizer for crops. Increasing the arable land, however, simultaneously requires more efficient means for sowing and harvest. These dynamics create the problem of peak seasonality – or, low labor needs for much of the year and very acute needs for weeks, or even days – that so often requires force to gather the requisite men to work.²⁷

²⁷ A. Gilman, "The development of social stratification in bronze age Europe," *Current Anthropology* 22 (1981): 1-8; A. Sherratt, "Plough and Pastoralism," in Hodder, Isaac and Hammond, eds. *Patterns of the Past* (Cambridge, 1981), 261-305; P. Rowley-Conwy, "The interpretation of ard marks," *Antiquity* 61 (1987): 263-266.

There is also a clear cross-cultural relationship between the introduction of the plow and the sexual division of labor. Before plow cultivation, women organized cereal cultivation, yet as plows become increasingly common agrarian labor shifted to men. The new technology was heavier and difficult to maneuver; the physical ability to direct oxen gave men a distinct advantage over women, the results of which were profound. Scholars have long recognized a close association between gender roles and the differential uses of hoe- and plow-based cultivation. Ester Boserup was the first to argue for the importance of agrarian technology on the subsequent development of gender-based norms and values. Recent econometric analysis confirms this relation across cultures and periods, including the present. This evidence suggests cultural norms and economic roles of the sexes originate in traditional farming practices: historically, women are much more involved in farming systems that do not use plows, which carries over with striking regularity to contemporary gender roles in the workforce. In such systems, women perform most tasks linked to saving seed, planting, cultivating and harvesting using handtools and other small-scale technologies. Groups whose ancestors moved to plow-based cultivation, that is, have sharply differentiated economic roles for women, even today. The plow drove social norms to a rigid division of labor rather than vice versa.

Contemporary data suggest male perceptions about work and politics differ in plow-based cultures, too. Yet, while use of the plow shapes culture where it takes over, during this period other factors coincide to make adoption of the plow a live choice.

These include the type of land, the quality of soils, crops and climate. Plows are most useful for crops requiring large fields cultivated over relatively short time-frames – crops

such as wheat, barley and rye – while crops such as sorghum, millet, roots and tubers are less suited to the plow. ²⁸

Thus, plow technology and gender roles were distributed unevenly. War disrupted social reproductive patterns, isolating entire kin-groups of women and children as instruments of imperial ambition. That women were the first to be enslaved is supported by overwhelming evidence. As organized raiding and warfare increased, men were killed while women and children were raped, enslaved and taken as "booty" along with other material goods and livestock. In Mesopotamia, the earliest reference to such enemy combatants dates to 2500 B.C., with Babylonian texts listing blinded captives put to work in orchards, starting a long association of blindness and slavery. A wide array of linguistic and cultural evidence also indicates foreign women were enslaved prior to men. The Akkadian cuneiform for *slave*, for example, joins the signs *woman* and *mountain*, in part because most of the enslaved came from the eastern mountains. Enslaved women were also typical in Babylonia, where they were used mainly as domestic servants in more affluent households.²⁹

The ubiquity of enslaved women across the ancient Near East would soon end, however, replaced by an equally sudden appearance of enslaved male war captives. Many such men were castrated as punishment for a crime or in preparation for harem service; common in Mesopotamia and China – where slavery emerged mainly from the penal

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²⁸ E. Boserup, *Woman's Role in Economic Development* (London, 1970), 13-14; A. Alesina, I. Giuliano and N. Nunn, "On the Origins of Gender Roles." Working Paper 17098, National Bureau of Economic Research, May 2011, esp. 10-33; H. Baumann, "The Division of Work According to Sex in African Hoe Culture," *Africa: Journal of the International African Institute* 1:3 (1928): 289-319.

²⁹ There is debate whether blindness was physical or metaphorical, or both. The Torah mentions blinding prisoners of war (cf. Judges 17:21, II Kings 25:7 and 2 Samuel 11:2); Herodotus writes of Scythians blinding prisoners of war (IV, 2); in Egypt, while the verb "to slave" connotes forced labor, its noun form also means "weaver's comb," as female slaves were widely weavers and textile workers. Struve and Tyumenev, "The Problem of the Genesis, Development and Disintegration of the Slave Societies of the Ancient Orient," in Diakonoff, ed. *Ancient Mesopotamia*, 23-24, 17-69, 88-126;

system rather than war – criminals were punished by mutilating the nose or feet, facial tattoos, branding and castration, which not only turned on the severity of the crime, but could be exacted on both the criminal and his family. In Persia, Rome, China, Byzantium, Egypt, Syria and much of Africa, this created a class of political eunuchs, notable if only for the common need to visibly mark bodies to designate a permanent condition of servitude, let alone the centrality of sexual violence to reinforce and reproduce habits of enslavement.³⁰

The vast majority of slaves were women, as conquering armies of the prehistoric Near East Mesopotamia regularly killed all male prisoners of war and enslaved women and children. Not only were women the first slaves, then, as a group women were the first to experience the psychosocial effects of the fear of enslavement. The impact of sexual violence – especially rape – was two-fold, affecting women and men differently. Not only did rape dishonor women; by implication it symbolically castrated men. Insofar as the concept of male honor is the embodiment of autonomy – the power to dispose of oneself and body, as well as the right acknowledged by others – it is entirely absent for women under patriarchy; without even custodial power over children, women lack such power in their bodies, being at the constant disposal of fathers, husbands and other male kin for reproduction, pleasure and service. Deprived of honor, female virtue turned on virginity and fidelity – concepts which were not yet developed in the second millennium. The domination of native women more easily transferred to captured women than men.

³⁰ R. Harris, "Notes on the Slave Names of Old Babylonian Sippar," *Journal of Cuneiform Studies* 29:1 (1977): 46-52; Gelb, "Prisoners of War in Early Mesopotamia," *Journal of Near Eastern Studies* 32 (1973): 91; E. Thompson, "Slavery in Early Germany," in M. Finley, ed. *Slavery in Classical Antiquity*, 195; E. Pulleyblank, "The Origins and Nature of Chattel Slavery in China," *Journal of Economic and Social History of the Orient* 1:2 (1958): 190; J. Watson, "Transactions in People," in *Asian and African Systems of Slavery*, 232; C. Wilbur, "Slavery in China during the Former Han Dynasty, 206 BC-AD 25," *Publications of the Field Museum of Natural History* 34 (1943), 84, 286, 133, 162-163, 183; C. Greenidge, *Slavery* (London, 1958), 29.

The subordination of female captives was soon established in patriarchal institutions such as marriage through the ideology of female honor in chastity and obeisance. For Lerner:

The cultural invention of slavery rested as much on the elaboration of symbols of subordination of women as on the actual conquest of women. By doing so first with women of their own group, and later of captive women, men learned the symbolic power of sexual control over men and elaborated the symbolic language in which to express dominance and create a class of psychologically enslaved persons.

First with women and children, men learned that all humans could be enslaved. Yet the enslavement of physically robust men was rare at first, and only later did techniques and concepts develop to make enslavement a robust social institution.³¹

In the transition to agriculture, then, the exploitation of human labor in general, and female reproductive labor in particular, become inextricably linked. Sometime in the Neolithic relatively egalitarian groups with a sexual division of labor were displaced by highly structured groups in which private property and the exchange of women based on exogamy and incest taboos were increasingly common. In the transition from matrilineal and matrilocal to patrilineal and patrilocal societies – with no evidence for the reverse, notably – surviving groups were not only more complex in terms of the division of labor, but entailed new forms of hierarchy in which *some* men exercised power over *all* women and the rest of men. Sexual and economic enslavement were thus unified at a very early point; the authority of fathers over children functioned as the ideological basis for domination. After male domination is established, women are perceived in an entirely

³¹ Patterson, *Slavery and Social Death*, 120-121; Lerner, *Creation of Patriarchy*, 80-81; S. Feigin, "The Captive in Cuneiform Inscriptions," *American Journal of Semitic Languages and Literatures* 50:4 (1934), 229-230; see also, K. Oliver, *Women as Weapons of War* (New York, 2007).

new way, transformed into an inferior group that in turn facilitates the transfer of such status to others groups in the form of enslavement.³²

In archaic city-states, enslaved persons were unequivocally a type of property while also a dependent member of the household entitled to protection. As enslavement was increasingly institutionalized, however, slave status began to denote an inferior species of human altogether. What is more, over roughly a millennium this process tracks the ideological differentiation of women and men vis-à-vis the public and private realms. As the economic power of men was consolidated by their relation to private property and the means of production, in other words, the status of women was circumscribed to the roles of reproducing the sexual and material bases of everyday human life. Free married women and slave women existed on a continuum of unfreedom, with the central difference turning on the inability of slaves to own their own body. For men, social hierarchy and political power was founded on property relations reinforced by violence or the threat of violence; for women, this hierarchy was mediated by the status of the men on whom they depended for protection and support. The enslaved, then, were at the bottom of this social scale; their bodies were claimed by free men and women alike, exploited by men as a commodity created for appropriation and consumption.

In this way, it is likely concubinage emerged from patriarchal privilege and was a transitional form of dependency in the unfreedom of marriage. Concubinage seems to antedate the Hammurabi Code, where there are a number of laws governing concubine slaves and their rights as mothers and wives. The significance of private property in kin-

³² P. Aaby, "Engels and Women," *Critique of Anthropology* 3:9-10 (1977): 39-44; for a case study, see J. Nash, "The Aztecs and the Ideology of Male Dominance," *SIGNS* 4:2 (1978): 349-362; Lerner, *Creation of Patriarchy*, 52; R. Reiter, "The Search for Origins," *Critique of Anthropology* 3:9-10 (1977): 5-24; R. Carneiro, "A Theory of the Origin of the State," *Science* 169:3947 (1970): 733-738.

groups led to concubinage as a means to maintain and reproduce property relations across generations. The dual role of concubines – performing procreative services to men and domestic services to women – illustrates how sexual and economic enslavement were unified by patriarchy at a very early point. Not only do slaves owe sexual service to masters, but women were obligated to serve and obey the men in whose household they reside for the protection and subsistence they receive. Barren women are considered defective and worthless, for only through children do women justify the social and economic burdens of their maintenance. In this regard, Sherry Ortner argues that the vertical class bonds coincident with hypergamy – upwardly-mobile marriages by lower-class women – are crucial to mechanisms of social control in stratified societies. Because hypergamy relies on the enforced chastity before marriage of lower-class girls, female sexual purity is a familial asset fiercely guarded by men, but insofar as abstinence is maintained entails women cooperating in their own subordination.³³

Thousands of clay tablets from Sumer in the third millennium, and Babylon in the second, provide key insights of how prolonged social conflict gave birth to early kingdoms, and how state entrepreneurs often used their families – especially wives and daughters – to secure, consolidate and extend their power. One example comes from well-preserved records at Lagash around 2350 B.C., over the reigns of Lugalanda and his successor Urukagina. Extant records from the Bau temple in the early third millennium provide a vivid portrait of the life of Sumerian aristocrats, especially of women. The temple spanned nearly a mile and employed more than one thousand people; the temple was managed by the wife of Urukagina, Queen Shagshag, who, in her role as chief

³³ I. Mendelsoh, *Legal Aspects of Slavery in Babylonia, Assyria and Palestine* (Williamsport, 1932), 23; on the Hammurabi Code, see G. Driver and J. Miles, *The Babylonian Laws*, 2 vols. (Oxford, 1955) and R. VerSteeg, *Early Mesopotamian Law* (Durham, 2000).

priestess, enjoyed full authority over her domain, which included one hundred and fifty female slaves spinning, wool-working, brewing, milling; general kitchen staff; and even several musicians and an enslaved singer. Also working her estates free men provided seed and draft animals in exchange for weekly food rations; hundreds of fishermen and ninety shepherds tended livestock; a male swineherd with six slaves to grind grain for pigs; and five cattlemen led by the queen's brother. Interestingly, that members of the royal family worked in such capacities suggests the monarchs were commoners by birth, yet as queen she held slaves and administered a large public temple.³⁴

With greater control of the population came more explicit documentation of their rights and requirements. The reign of Urukagina and Shagshag are marked by a series of "reforms," which, despite their proclamation by edict, are often cited as the earliest documented attempt to establish basic legal rights for citizens, specifically for women. At this early stage wealthy women could represent their husbands, and held significant positions of authority. In early states, then, the status of women is ambivalent: while they are not prohibited from having power, they are typically of lower status than men.

The earliest Sumerian dynasties were in the cities of Kish, Warka and Ur.

According to the so-called king lists, at Kish the founder of the dynasty was Queen KuBaba, who reportedly reigned after being a tavern-keeper, and is later identified with the
goddess worshiped in northern Mesopotamia. She is the only woman listed as having
reigned in her own right; the merging of her historic and divine personality is not unlike

³⁴ A. Tyumenev, "The Working Personnel on the Estate of the Temple BaU in Lagos During the Period of Lugalanda and Urukagina (24-25th century B.C.)," in Diakonoff, ed., *Ancient Mesopotamia*, pp. 93-95; C.C. Lambert-Karlovsky, "The Economic World of Sumer," in D. Schmandt-Besserat, ed., *The Legacy of Sumer*, 62-63; W. Hallo, "The Women of Sumer," in Schmandt-Besserat, *The Legacy of Sumer*, 29; K. Maekawa, "The Development of the É-MÍ in Lagash during the Early Dynastic III," *Mesopotamia* 8-9 (1973-74): 77-144, 137-142.

the mythical demigod ruler of Warka, whose exploits are immortalized in the epic of *Gilgamesh*. In this way, both kings and queens are ascribed royal divinity, and basic to Sumerian religious beliefs was a willingness of servants to follow their lords unto death. Royal tombs at Ur reveal ruling queens shared in the status, power, wealth and ascription of divinity with kings, but the overwhelming preponderance of female skeletons among the dead also intimates a greater vulnerability and dependency of all women.³⁵

Hittite religion and society are exemplary of the transition from matrilineal to patrilineal kinship and political power; women go from being powerful in their own right, to symbols of exchange between powerful men. At its height in Anatolia from 1700 to 1190 B.C., the Hittites combined elements of the more ancient Hatti culture with the Indo-European traditions that invaded the area sometime at the end of the third millennium. Early Hittite royal succession turned on male rulers rising to power through maternal lineage, as sons of the tawananna, the hereditary title of chief priestess with considerable political and economic power. Early Hittite kingship thus remained matrilineal, as the title tawananna was passed to their daughters as well. In the early second millennium, however, the first strong Hittite king challenged these rituals of succession, abolished the tawananna, and proclaimed himself chief priest. Yet even this did not eradicate the matrilineal traditions of Hittite governance, and another dynasty would come and go before it was completely transformed. Internal conflicts over succession weakened the Hittite kingdom, and its enemies nearly destroyed it. In 1380 B.C. another strong king, Suppiluliumas I, founded a dynasty that reinvigorated the

³⁵ Redman, *Rise of Civilization*, 297-298, 306; Lerner, *Creation of Patriarchy*, 66; for different views of this revolt, cf. V. Struve, in Diakonoff, ed., *Ancient Mesopotamia*, pp. 17-69, 127-172; A. Tyumenev, "The State Economy of Ancient Sumer," *Ibid.*, pp. 70-87; for recent feminist interpretations see, R. Rohrlich, "State Formation," *Feminist Studies* (1980), p. 97; P. Moorey, *Ur of the Chaldees* (Ithaca, 1982), 51-121; Redman, *Rise of Civilization*, 297-298; Glubok, *Discovering the Royal Tombs*, 48-49, 80.

Hittite empire, which for another century rivaled Egypt and Babylon. His key innovation in statecraft was to install vassal kings in conquered lands to whom he then married his daughters; neighboring rulers soon followed suit, and the practice became well-established in Sumer and Mari under similar dynastic conditions. By radically reorganizing the relationship of women to power, female bodies became the instruments of male power, and any power they achieve was dependent on their sexual and reproductive relationship to particular men. With the formation of hereditary rulership, women's value is increasingly tied up with their ability to produce children.³⁶

After the collapse of the Akkadian empire, a long struggle for domination of Mesopotamia ensues, with rulers developing dynastic and diplomatic marriages to consolidate territorial gains and mitigate war. Indeed, this practice continues in the present whenever rulers need to reinforce power over conquered or neighboring land and people. As Lerner notes, this is only a more abstract and elaborate form of the exchange in which women play an important – if ambiguous – role in patriarchal politics: on the one hand, they found themselves the political pawns of their fathers, much like their male siblings; on the other hand, these princesses were often influential actors themselves, both politically active and powerful. In service of the family interests, this tiny class of ruling-class women received the best education possible. Several extant legal texts shed insight into the socioeconomic conditions of southern Mesopotamia at a time when they often played this key role. In spite of dependence upon their husband and other male kin, these

³⁶ Lerner, Creation of Patriarchy, 91-92; Patterson, Slavery and Social Death, 141-142, 144-145; Wilbur, "Slavery in China," 133, 162-163; S. Ortner, "The Virgin and the State," Feminist Studies 4:3 (1978): 26.

texts clearly indicate active participation by women in economic, religious and political life. These women lacked official power, but exercised de facto power.³⁷

In this way, the formation of archaic states is marked by the institutionalization of property, social classes and political hierarchy, trade and specialization, urbanism and dense population centers, military elites and warrior kings, the transition to agriculture and the spread of social relations of enslavement, and a transition from a kin-based society to the patriarchal family as the primary means by which wealth and power were transmitted across generations. The emergence of the state entailed several key changes to the status of women as well. Female subordination is codified and institutionalized, prostitution is legalized and regulated, and economic specialization increasingly excludes women. After the invention of writing, women are denied education, as cosmogonies usurp female deities with sociodicies of male power.³⁸

Monoculture and Monotheism

Just as the intersection of plow and war introduced significant changes to kin and gender relations, the rise of archaic states initiated a profound transformation of religious beliefs and rituals. Precisely as social and economic trends drew people increasingly into urban orbits, there was a decisive shift from worship of female to male deities. Widespread evidence confirms worship of a mother-goddess in the Neolithic, the oldest of which are at Čatal Hüyük in the seventh millennium with an abundance of female figurines emphasizing breasts, navel and vulva, often in a squatting position used in birth. Legs

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³⁷ Boulding, *The Underside of History*, 429; Lerner, *Creation of Patriarchy*, 75; Hallow, "Women of Sumer," 34; N. Yoffee, *The Economic Role of the Crown in Old Babylonian Period* (Malibu, 1977), 148.

³⁸ Boulding, "Public Nurturance and the Man on Horseback," in Murray, ed., *Face to Face*; M. Harris, "Why Men Dominate Women," *Columbia* (1978): 9-13, 39; Lerner, *The Creation of Patriarchy*, 56-57.

parted, navel and belly protruding, the horns and heads of bulls surround her, likely the symbols of virility. Though such artifacts are themselves insufficient to establish worship of the mother-goddess, there is little doubt these Neolithic figurines held special – possibly religious – meaning; their use as amulets in childbirth are likely given their appearance across a wide range of times and places. Arguments for their religious significance rest in the myths, rituals and creation stories from the fourth millennium B.C. as they appear in elaborate settings with recurring traits. Depicted amid pillars and groves, goats, snakes and birds accompany her with eggs and lush vegetation. The link of the goddess to the moon alludes to a mysterious, hidden power over nature, sea and seasons; earth and stars, humans and nature, birth and death are all embodied by this mother-goddess. Her cultic worship turned on her various guises as the source and creator of life, symbol of birth and death. Venerated for both virginity and maternity – even as a virgin bride to the gods – she is also sexually liberal, a protector of prostitutes and patron goddess of taverns. In her name sex is sacred and honored ritually, and in her duality she embodies nature itself, day and night, life and death, male and female. This form of worship indicates a high regard for women and the concepts associated with them.³⁹

Social norms emphasizing kingship and military glory likely led men to need a masculine god as the embodiment of newly-realized creative principles, a trend which continues for more than a millennium and culminates with the Hebrew book of Genesis. As early as the third millennium B.C. Egyptians venerated Osiris as a symbol of male generativity, which is coincident with the early formation of strong kingship, with pharaohs ruling as incarnate gods. Religious beliefs, then, were closely tied to social

³⁹ M. Gimbutas, *Goddesses and Gods of Old Europe* (Berkeley, 1982), 18; James, *Mother-Goddess*, 1-46; Lerner, *Creation of Patriarchy*, 147; see also, M. Stone, *When God Was a Woman* (New York, 2012).

conditions, as generative male god figures reflect a newly-founded masculine power in the domination of male principle in creation narratives. Some time in the early third millennium, with archaic states and the rise of strong male kings, the mother-goddess is displaced from the head of the pantheon, replaced by a male god – usually of wind, air or thunder – that increasingly comes to resemble the earthly figure of king. The mother-goddess is thus transfigured into an earth goddess, often appearing as female consort to the gods of vegetation, as the result of the rising influence of priests in certain cities and temples where ancient myths are recorded for explicitly political ends. ⁴⁰

This association of earthly power with male creator gods was a particularly effective strategy, allowing rulers and priests to claim divine warrant for their actions, and the relationship of theogeny to social power only strengthens with time. Written around 1100 B.C., for example, *Enuma Emish* figures chaos as life-giving Tiamat, who is confronted by rebellious gods aiming to create order. In the ensuing battle, a young rebel named Marduk slays Tiamat, from her carcass establishing order on heaven and earth. To create humans, these murderous gods mix the blood of Tiamat's dead husband with the soil. Thus, a fertile female figure must be killed, and succeeded by a law-giving male figure, in order for humans to exist. The primary Babylonian god, Marduk first appears in the reign of Hammurabi and his dominance of Mesopotamia; along with Ashur in Assyrian cosmogony, their rise to national deities reflects an ongoing rivalry in Mesopotamia between two archaic states, each under absolute monarchs with claims to divine mediator of heaven and earth. Likewise, in Canaanite mythology the young storm god Baal assumes primacy in the pantheon through a conflict with Mot, the god of death.

⁴⁰ S. Kramer, "Poets and Psalmists; Goddesses and Theologians," in D. Schmandt-Besserat, ed. *The Legacy of Sumer* (Malibu, 1976), 14.

When Baal descends to the underworld to confront Mot, all earthly vegetation dies; after his sister and consort search everywhere for him, Anath finds him dead and buries him, vowing revenge. In a fierce battle with Mot, Anath kills him, cuts up his body, crushes it, winnows it in a sieve, grinds it in a mill and scatters it on the fields. By killing the god of death and treating his body as grain, Anath restores terrestrial fertility. Both Baal and Mot are later resurrected, with the eventual triumph of Baal displacing Anath as supreme goddess and creator of life. Thus, while these myths use goddesses as symbols of lifegiving fertility, this quality is ultimately superseded by male creative power.⁴¹

Kings ultimately assume control of temples associated with the highest deity. In the earliest kingship at Lagash, for example, Lugalanda appointed himself and his wife as chief administrators of the two main temples. By the era of Hammurabi kingship already embodied several aspects of divine royalty; between king and god, a continuous flow united earthly and cosmic power, replacing the mother-goddess with a domesticated consort to the god of creation. Everywhere, however, increased focus on male creators coincides with more intensive forms of agriculture. In Anatolia, Greece, Egypt and Elam the same process occurs at different times, with the earliest known forms of religious worship of the female as an awesome, powerful, transcendent force. The primal force is the sea, water and the mystery of the egg, which opens with new life; snake-, sea-, virgin-, and artisan-goddesses creating humans from clay – it is women who hold the key to life. So the supreme goddess is found in the earliest origin myths celebrating the generative procreative powers of the feminine, even as male gods were also frequently involved in creation. In this sense, the necessity of female and male participation in creation is firmly established in Sumerian and Akkadian mythologies. Over time and in different ways the

⁴¹ Jacobsen, *Tammuz*, 20-21; James, *Ancient Gods*, 87-90; Lerner, *Creation of Patriarchy*, 154.

mother-goddess is increasingly joined by a male partner – usually a son or brother – who participates in the rites of fertility by mating with her. In both myth and ritual this male god is young, and typically must die to initiate rebirth. Edwin James argues introduction of the male consort to this mythology is related to the spread of domesticated animals, for with animal husbandry the male reproductive function became apparent, or at least better understood. Unlike hunters, farmers who raise animals must ensure that females are impregnated by males if they are to reproduce.⁴²

So, while the mother-goddess remained the source and creator of life, there is more emphasis on the male aspect of creation. Rather than being the magical source of creation, fertility goddesses must be impregnated by a male to produce resources in a beneficial and productive way, as with fields that must be plowed. Still, male creators did not immediately become the primary gods. "Although he was the begetter of life," James notes, "he occupied a subordinate position to her, being in fact a secondary figure in the cultus." One of the primary fertility rites in the third and fourth millennia B.C. was the *heiros gamos*, or sacred marriage, a widely practiced ritual from Mesopotamia to the Aegean that took many forms and had a complex range of meanings. Only after the goddess joined in sexual congress with the young god, in the process killing him, did the annual cycle of seasons begin; ritual public intercourse celebrated the drama of life and death. Her sexuality was sacred and conferred blessings of fertility on earth and people. The transformation of the all-powerful mother-goddess to the domesticated fertility goddess linked to cereal cultivation is a key symbolic change. 43

⁴² Lerner, Creation of Patriarchy, 180, 146; James, Cult of the Mother-Goddess, 228-253.

⁴³ E. James, *The Cult of the Mother-Goddess* (London, 1959), 228-253, 114-117; J. Pritchard, *Ancient Near Eastern Texts Relating to the Old Testament* (Princeton, 1950), 100; Lerner, *Creation of Patriarchy*, 150.

Attendant the shift from powerful goddesses to a single male god is the transition from polytheism to monotheism. According to Fernand Braudel, the transition from the mother goddess to the male gods and priests prevalent in Babylon and Sumer is linked to the introduction of the plow. The central methodological issue is the relation between social changes and ideological changes, which in Mesopotamia included a number of distinct societies and cultural practices. Ideas are not created ex nihilo, of course, and already reflect events and mental constructs of historical human beings living in society. In this way, Peggy Reeve Sanday argues gender symbolism in creation myths provides a reliable guide to sexual roles and identities in a given society; origin narratives, that is, articulate basic norms about the relation of humans to nature and the sources of earthly power. In her historically contextualized study of such stories and their societies, Sanday finds a close correlation between gender roles in the creation narratives and the primary mode of subsistence and reproductive patterns: where men hunt, fathers are distant from children and power is conceived as beyond male control, yet when gathering is central fathers are distinctly more involved in childrearing and ideas of creative power turn on female (or couple) symbolism. This analysis is true for creation narratives of the ancient Near East, where major socioeconomic changes prior to, and coincident with, are clearly evident in a number of societies throughout the second millennium B.C.⁴⁴

This was a profound change in human symbolic life, which according to Lerner circulated around three basic questions about the creator of life, the origins of evil and the mediation of humanity and the divine realm. In this sense, she notes, the metaphorical shifts occur from the vulva of the goddess to the seed of man, from the tree of life to the

⁴⁴ F. Braudel, *The Mediterranean in the Ancient* World (London: Penguin, 2002), 107; Sanday, *Female Power and Male Dominance* (Cambridge, 1981), 57, 73, 61, 66; T. Jacobsen, "Primitive Democracy in Ancient Mesopotamia," *Journal of Near Eastern Studies*, 2:3 (1943), 162, 165.

Mesopotamians, the source of death and sin was addressed through a narrative accounting for how humans displeased the gods and why good men suffer. With rulers figured as gods, and humans as obedient servants, hardship, sickness and defeat were caused by the displeasure of the gods with humanity. In Mesopotamia death was a reality, unavoidable in the plot of humanity, yet it is also personified in a god or goddess. Eternal life was similarly substantial: one gained it by eating a certain food, the "plant of life." In *Gilgamesh*, for example, the wild man Enkidu lives in harmony with nature and speaks to animals. After befriending a harlot who "civilizes" him by copulating with him for seven days, the animals flee.

It was not as before

But now he had wisdom,

broader understanding.

Thou art wise, Enkidu, art become like a God.

Sexual knowledge thus separates him from nature, and its privation makes him closer to animals. Likewise with the quest for immortality. Although only a demigod, Gilgamesh is ultimately denied immortality, a privilege of the gods alone. Here the serpent – usually associated with the fertility-goddess – guards secret, hidden knowledge.⁴⁵

This metaphysics and mythology of the name intersects the concept of creation, transforming generativity and procreativity from a mystic feminine fertility to self-conscious creation with divine figures of both sexes. From this a new concept of creation

⁴⁵ Gilgamesh, S. Mitchell, trans. (New York, 2006), 42-56; Lerner, Creation of Patriarchy, 146; H. and H. Frankfort, "Myth and Reality," in H. Frankfort, J. Wilson, T. Jacobsen, W. Irwin, The Intellectual Adventure of Ancient Man (Chicago, 1946), 14-17; for more, see R. Graves, The White Goddess (New York, 1966); E. Neumann, The Great Mother (Princeton, 1963); J. Ochshorn, The Female Experience and the Nature of the Divine (Bloomington, 1981); C. Ochs, Behind the Sex of God (Boston, 1977).

emerges from the third to second millennia B.C. In a range of mythologies, the existential import of the name assumes an increasingly important function: nothing exists if it is unnamed, and both gods and men are created in the act of naming. For example, the Babylonian epic *Enuma Elish* begins:

Firm ground below had not been called by name, Naught but primordial Apsu, the begetter, [and] Mummu-Tiamat, she who bore them all. Their waters commingling as a single body...Uncalled by name, their destinies undetermined – Then it was that the gods were formed within them.

Importantly, creation here requires comingling fertile forces as a precondition for life, yet before even this can begin there is something "within them" that is later "called" to life through naming. According to Georges Contenau, the "creating god mentally defines the nature-to-be of his creation: when it has taken final shape in his imagination and he has given it a name, he draws its shape, whereby it acquired almost complete life." While Gilgamesh is similar, in an Akkadian myth the god Enlil draws a dragon on the sky that is subsequently enlivened.46

The symbolism of these creation myths is in all likelihood the result of a significant change in human experience related to the historic changes then transforming life across the ancient Near East. Both the appearance of the concept *name* and the beginning of its metaphysical significance are coincident with the inventions of writing and history. Record-keeping and the elaboration of complex symbolic systems mark the advent of fully-realized abstract institutions. As Lerner points out, such a capacity must have appeared magical at first, for the powers afforded by writing and mathematical

⁴⁶ Ouoted in J. Pritchard, Ancient Near Eastern Tests Relating to the Old Testament (Princeton, 1950), 60-61, 75; G. Contenau, Everyday Life in Babylon and Assyria (London, 1954), 33-34;

notation undoubtedly transformed the perception of time and space, then religious myths and ideologies.⁴⁷

With these religious changes an increased focus on paternity and the sexual fidelity of women developed. The Sumerian logic of reproduction was distinctive in the ancient Near East, with one key difference: a belief in reincarnation. For societies believing in reincarnation, paternity is generally of negligible importance. By contrast, Sumerian ideology construed human sex in starkly agrarian terms: men planted seeds in women from which children grow. The origins, growth and protection of this seed thus assumed vital importance, with female promiscuity creating intolerable levels of social doubt about paternity. If only because inheritance was already patriarchal, the state intervened under the aegis of male rights, but always couched in normative ways to figure good and evil as divine will. Even with this increasing level of control over women's bodies, however, female deities were seen as having power over men.

Powerful women remained in cultic service; in Mesopotamia, feeding the gods was understood as central to community survival, performed by men and women for proactive and retrogressive appeasement. A common prayer ran:

Gracious Ishtar, who rules over the universe,

Heroic Ishtar, who creates humankind,

who walks before the cattle, who loves the shepherd...

You give justice to the distressed, the suffering you give them justice.

Both Mesopotamian men and women thus humbled themselves before the goddess and her priestly servants with the attitude of slave to master, praising and worshiping her

⁴⁷ Lerner, Creation of Patriarchy, 194, 151-152.

power. Another hymn to Ishtar addresses her as "mistress of the battlefield, who pulls down the mountains," and later:

Majestic one,

lioness among the gods, who conquers the angry gods,

strongest among rulers, who leads kings by the lead;

you who open the wombs of women...mighty Ishtar, how great is your strength! And in Babylonia the sick and injured came to the temple of Ishtar with foods such as oil and wine, or even a young sacrificial animal, seeking grace for assumed transgressions, or offerings including images of a vulva fashioned out of precious lapis lazuli stone. Men and women offered such prayers in distress, suggesting both sexes equally capable of supernatural power and as potential mediators of gods and men.⁴⁸

This is much different than later Christian prayers for intercession by the virgin mother of God precisely because she has no power herself, and can only appeal to divine mercy. By contrast, Ishtar and other similar goddesses had power in their own right – that is, the kind men possessed – derived from military exploits and an ability to impose her will on gods to direct their actions; importantly, though, she had a vagina like any woman. In this way, there was an extended period in which a demoted goddess continued to hold considerable power over everyday life and influence popular belief even after her displacement.⁴⁹

From these cosmogonies, then, the concept of generativity comes to include both creativity and procreativity. While creativity is the ability to create something out of

⁴⁸ Quoted in *Inanna: Queen of Heaven and Earth: Her Stories and Hymns from Sumer*, D. Wolkstein and S. Kramer (New York, 1983), 51-73, esp. 66.

⁴⁹ E. Ebeling, "Quellen zur Kenntnis der babylonischen Religion," quoted at Lerner, *Creation of* Patriarchy, 142-143; Flannery and Marcus, The Creation of Inequality, 475-480.

nothing, procreativity is the capacity to produce offspring. Explanations of generativity were still overwhelmingly religious in character, shifting over time from an all-powerful mother-goddess to an all-powerful creator storm-god, whose female consort was but a domesticated version of the fertility goddess. With the Hebrews, however, this male god is replaced by a single omnipotent father god incorporating the principle of generativity in both respects. Unlike the myths of their Mesopotamian neighbors, the god of Genesis has neither terrestrial ties nor a female consort; no longer is there a theological link to the maternal source of creation and earthly human life, nor is there any indication creativity and procreativity are associated. In fact – and almost wholly on the contrary – the divine act of creation is now beyond human experience. ⁵⁰

⁵⁰ W. Albright, From the Stone Age to Christianity (Baltimore, 1940), 199; E. James, Myth and Ritual in the Ancient Near East (London, 1958), 63.

CHAPTER IV

PASTORALISM AND POWER

Coincident with the Natufians in Mesopotamia, inhabitants of the Nile Valley began to live in semi-sedentary camps some 11,000 years ago, gathering seeds and bulbs and using bows and arrows to hunt small and large game. Early domesticates and cultigens included local and foreign species, including local sorghums, millets, cattle, pigs and date palms, as well as barley, sheep and goats from the Near East; in addition to wild horses and cattle, they hunted hippopotamus and trapped turtles in the estuaries. Around 5,000 B.C. fully-sedentary agrarian settlements appear across the region as the population begins to rapidly expand. Early Egyptian farmers lived in round huts with clay floors and grew wheat, flax and two types of barley; as cereal agriculture arrived, the first cattle were domesticated by shepherds grazing hostile and inhospitable terrain. By 3500 B.C. Egyptians had domesticated the native wild ass, which dramatically increased the efficiencies of conveyance and so escalated trade, carrying the heavy but valuable copper from African mines to craftsmen at the Eurasian suture.¹

Relatively unique geologically, the Great Rift Valley forms the western edge of the Fertile Crescent, connecting the east African savannah to the Jordon Valley in Palestine. Rift valleys and faulted terrains contain many distinct ecologies over a range of landscapes; river, mountain, desert and ocean come together in striking juxtaposition. To the east, a similar geomorphic event created another rift zone stretching from the Persian Gulf to the Caucus Mountains; as Iran folded under Arabia in the Pliocene, Mesopotamia sank slowly in the middle to create a number of distinct environments such as high

¹ Montgomery, Dirt, 40-44; Flannery and Marcus, The Creation of Inequality, 397, 400, 413, 419.

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plateau, intermontane valley, piedmont-steppe and alluvial desert. The earliest villages are found along these ecotones where symbiotic patterns of agriculture and pastoralism first emerge. As groups develop different lifestyles, they map contrasting meanings onto the landscape around them, with mountains signifying a freedom from the regimented cultures of the great urban agrarian centers.²

At the confluence of continental trade, the Egyptian state emerged from the arid alluvial plain of north Africa only around 3000 B.C., and soon the northern Nile Valley was the personal property of the king. Erecting centralized warehouses to store the parts of each harvest, herd and catch he appropriated from his subjects, the king ruled this huge apparatus with an elaborate bureaucracy of state agents, many of whom were slaves. In spite of eventually destroying the fields they created, the Egyptians developed highly effective agricultural techniques, particularly with regard to water. The durability of Egyptian agriculture is linked to its irrigation networks, which used natural flood patterns with minimal intervention. Prior to centralized irrigation, regulatory authority over water was local and social stratification low; after its introduction for cash-crop cultivation, however, it soon undermined traditional social relations, and class distinctions emerged. Rather than irrigation, then, centralization was the key factor in rising inequality in Egypt and across the ancient Near East.³

Several factors precipitate this transition, including climatic change, technological innovations and the amalgamation of large, dense urban populations. During the seventh millennium – or 9,000 years ago – the entire region from Egypt to Mesopotamia enters a

² K. Flannery, "Origins and Ecological Effects of Early Domestication in Iran and the Near East," in Ucko and Dimbleby, eds., *The Domestication and Exploitation of Plants and Animals*, 73.

³ Schneidau, *Sacred Discontent*, 60-61; Oppenheim, *Ancient Mesopotamia*, 41; R. Adams and T. Jacobsen, "Salt and Silt in Ancient Mesopotamian Agriculture," in P. Ucko, R. Tringham, and G. Dimbleby, eds., *Man, Settlement, and Urbanism* (London, 1972), 744.

wet phase associated with the mid-Holocene optimum, returning to drier conditions over the sixth and fifth millennia. While the region enjoyed a few centuries of more rainfall in between, its current dry phase began only in the mid-fourth millennium, or 3,500 B.C. In this way, Neolithic hunter-gatherers lived in a markedly wetter environment than later farmers and shepherds; by the late Neolithic, however, settlement patterns were disrupted as an arid climate caused many to revert to more extensive subsistence strategies. While this trend of "reversion" to nomadism is actually quite common ethnographically, the dynamic was characteristic in the ancient Near East.⁴

Sufficient evidence exists to reconstruct the transition from hunter-gathering lifestyle of the desert Neolithic to the pastoral nomadism of the Chalcolithic and early Bronze Age. While the so-called "Secondary Products Revolution" is difficult to date, its effects leave clear traces. The first systematic exploitation of dairy products and extensive use of wool and hair is found at Chalcolithic, or Copper Age, Israel. In both the Negev and Sinai, patterns of increased sedantism and urbanism were broadly similar to those found in Mesopotamia, where hunter-gatherers adapted to increasing desertification in the sixth and seventh millennia B.C. In stark contrast to parallel sites in north-central Israel where domesticates already predominate, a range of lithic artifacts indicate hunting remained central to these early desert pastoral nomads. From the mid-fourth to third millennia, however, the overall food ecology shifted as these former hunters became herders, moving across the Sinai and southern Negev following seasonal patterns of

⁴ Rosen, "Demographic trends in the Negev Highlands," 503; Ofek, *Second Nature*, 210; F. Barth, *Nomads of South Persia* (Boston, 1962), 101-121; R. Adams, "Strategies of maximization, stability, and resilience in Mesopotamian society," *Proceedings of the American Philosophical Society* 122 (1978): 329-35; M. Rowton, "Autonomy and Nomadism in Western Asia," *Orientalia* 42 (1973): 247-258 and "Dimorphic Structure and the Parasocial Element," *Journal of Near Eastern Studies* 36 (1977): 181-198; R. Bryson, "On Climates of the Holocene," in *Man and the Mid-Holocene Climactic Optimum*, N. Mckinnon and G. Stuart, eds. (Alberta, 1987), 1-13.

aggregation and disaggregation based on the availability of water. In fact, clear evidence of long-distance exchange with central Israel in this time suggests two distinct cultures networked across regions trading copper, flint tools, ceramics and shells. By 3,000 B.C. these early Bronze Age desert societies had expanded to some three to ten times the Neolithic and Chalcolithic population densities. So while the Neolithic subsistence economy was based on intensive hunting and gathering, by the third millennium it was transitioning to pastoral nomadism with varying degrees of agriculture. Pastoralism thus emerges only late in the Neolithic in the deserts between Egypt and Mesopotamia.⁵

Unlike agriculture, then, pastoralism develops across a vast territory over a long period of time. Although scholars once held pastoralism was an antecedent to agriculture, it is now established animal domestication followed plants. Sedantism and horticulture were essential prerequisites for animal husbandry, which likely emerged as a response to increased demand for a regular source of protein as local game sources dwindled. Early domesticates were thus initially supplements to a broad spectrum diet, and the long delay in their dissemination is strong evidence against any acute precipitating factor such as famine, shortage, or stress as a major impetus in their incorporation into agriculture. While impossible to determine exactly, sheep and goats (or caprines) were domesticated in the foothills of the Zagros mountains a millennium or so after the arrival of agriculture

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⁵ P. Smith and L. Horvitz, "Radiographic evidence for changing patterns of animal exploitation in the southern Levant." *Journal of Archaeological Science* 11 (1984): 67-475; P. Ducos, "The earliest domesticated animals in the Near East," in *The domestication and exploitation of plants and animals*, in P. Ucko and G. Dimbleby, eds. (Chicago: Aldine, 1969), 265-276; A. Sherratt, "Plough and Pastoralism," in *Patterns of the Past*, I. Hodder, G. Isaac, and N. Hammon, eds. (Cambridge, 1981), 261-305 and "The Secondary Exploitation of Animals in the Old World," *World Archaeology* 15:1 (1983): 90-104; S. Rosen, "Notes on the Origins of Pastoral Nomadism," *Current Anthropology* 23:3 (1988), 501-504; O. Bar-Yosef, "Seasonality among Neolithic hunter-gatherers in southern Sinai," in *Animals and Archaeology*, vol. 3, *Early Herders and their Flocks*, J. Clutton-Brock and C. Grigson, eds. (London, 1984), 202; S. Davis, "Climatic change and the advent of domestication," *Paléorient* 8:2 (1982): 5-15; B. Arieh, "Two cultures in southern Sinai in the third millennium BC," *Bulletin of the American Schools for Oriental Research* 262 (1986): 27-54; T. Levy, "The emergence of specialized pastoralism in the southern Levant," *World Archaeology* 15 (1983):15-36.

in the Levant, and in response to similar environmental conditions. Cereal agriculture arrived in the Zagros a thousand years or so after it began in southern Mesopotamia, and likely coincides with the natural expansion of grasslands attendant a rapidly warming climate. One way agriculture may have spread, then, is through contact of farmers and shepherds in the spaces between settlements as grazing ranges expanded.⁶

However it spread, caprine domestication in particular had a profound effect on human settlement social life, and was inextricably linked to the concentration of docile bodies in urban centers. Over the course of domestication, animals often lose "expensive" evolutionarily structures no longer necessary for survival in the wild, e.g., physical dexterity, intelligence, and the acuity of sense receptors; unable to survive without humans, in many ways they lose their "overall ecological bearings." That animal husbandry and pastoralism came to replace hunting so fully as the primary source of animal protein and secondary products is remarkable; but that it occurred in a period of climatically optimum conditions, with wild game still abundant, raises a host of complex questions regarding its impetus and ends. Husbandry is a time- and labor-intensive endeavor, which suggests a compelling economic or ecologic factor related to animal domestication. Although milk and other dairy foods might appear to be one clear advantage, such uses occupy only a marginal range of nomadic pastoralists.⁷

⁶ P F. Hole, "The context of caprine domestication in the Zagros region," in *The Origins and Spread of Agriculture and Pastoralism in Eurasia*, D.R. Harris, ed. (London, 1996), 277; Price and Gebauer, *Last Hunters, First Farmers*, 11; on the climate, see Hillman in ch. 10, *Origins of Agriculture and Pastoralism in Eurasia*; Rosen, "Notes on the Origins of Pastoral Nomadism," 504; for a different view, see S. Lees and G. Bates, "The Origins of Specialized Nomadism," *American Antiquity* 39 (1974): 187-193.

⁷ Ofek, *Second Nature*, 219; O. Bar-Yosef, "The Contributions of Southwest Asia to the Study of the Origins of Modern Humans," in *Origins of Anatomically Modern Humans*, M. Nitecki and D. Nitecki, eds. (New York, 1994), 39; for a model on the origins of specialized village pastoralism, see T. Levy, "The Emergence of specialized pastoralism in the southern Levant," *World Archaeology* 15 (1983):15-36; in general, see F. Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II* (New

There is tremendous cultural variation within pastoral societies, each adapted to specific ecological and economical conditions. There is also a wide variety of subsistence strategies within pastoralism proper, as well as differences in the extent of integration with villages and urban populations. In this way, it is important to differentiate between types of pastoralism – e.g., nomadic, semi-nomadic, sedentary, etc. – and the different methods employed in each, i.e., intensive, extensive, transhumance, etc. On the one hand, then, pastoralism is the most extensive form of agriculture. Large herds of relatively large animals eat a lot and thus must constantly be on the move; in this sense it incentivizes mobility and penalizes sedentarism. Pastoralism also offers economies of scale: few people can control huge numbers of livestock, especially those with a herd instinct.⁸

Two caprine traits render them especially susceptible to human manipulation: a strict dominance hierarchy and territoriality. Sheep are gregarious, naturally follow leaders and can be imprinted by humans if exposed in the first days of life; wild sheep are territorial, "inheriting" territories they occupy for extended periods, defending and relinquishing them only with reluctance. They move through territories, following seasonally available pasturage higher in elevations during the summer and lower in the valleys in the winter. When kept in large numbers, sheep and goats in all likelihood crowded out other wild populations of grazing and browsing animals, which also reduced the predator pressures associated with them. According to Hiam Ofek, caprines were highly suitable and well-timed objects of exchange in a market system with food becoming an increasingly important item in formal trade. They helped expedite the

York, 1972), 85-101; Bar-Yosef and Khazanov, Pastoralism in the Levant, O. Bar-Yosef and A. Khazanov, eds. (Madison, 1992), 1-10.

⁸ A. Khazanov, *Nomads and the Outside World* (Cambridge, 1984), p. 24.

division of labor in food production. They encouraged large-scale nomadism but also facilitated urban life.⁹

There are two important economic differences between wild and domestic animals, which are widely separated categories of commodities. Highly perishable, the procurement and consumption of meat must occur in relatively close proximity. With increasing sedantism associated with agriculture – itself a process that separates in time and space procurement and consumption – early settlements faced the issue acquiring flesh in an edible condition. Goats and sheep are highly durable commodities that can move themselves to market and remain fresh until there is a demand or opportunity for consumption. They are mobile in space and time, both to eat and be eaten; they can move themselves to market, through the landscape and seasons.¹⁰

From very early a split between agrarian valley people and pastoral hill people emerged across the ancient Near East. Despite ostensible historical enmity between agriculturists and pastoralists, it is crucial to understand how their symbiosis was central to the rise of west Asian civilizations. In what Carl Sauer called the worldwide cultural dialectic of "peasant and pastoral ways," pastoralism in the ancient Near East formed "that other ancient trunk whence spring the sowers, reapers and mowers; the plowmen, dairymen, shepherds and herdsmen." According to Herbert Schneidau, from this basis a culture "fissiparous specialization" emerged, with methods aimed at short-term exploitation rather than ancient wisdom rooted to ancestral land. The farmer and shepherd appear as dynamic symbols in many narratives of the ancient Near East. While recent scholars suggest the division of farmers and shepherds had a historical basis prior

⁹ V. Geist, *Mountain Sheep* (Chicago, 1971), 352; Y. Tani, "The geographical distribution and function of sheep flock leaders:," in J. Clutton-Brock, *The Walking Larder* (London: Unwin Hyman, 1989), 188. ¹⁰ Ofek, *Second Nature*, 208; B. Smith, *The Emergence of Agriculture* (New York, 1995), 65-67;

to being mythologized, others argue that its symbolism represents a deep psychosocial tension; in either case, the opposition of pastoralism to civilization is unmistakable. Sumerian literature, for example, is replete with fear evoked by nomads in cities and villages, already infused by a palpable contempt for their "primitive" culture. Like Egyptians, Sumerians were conscious of their urban grandeur, suggesting the origins of contrast lay less in social or economic displacement and more in contact by urbanites with a way of life so clearly different from "advanced" culture. Yet with the ancient Hebrews something dramatic occurs, with Genesis figuring farmers and shepherds in dynamic, interdependent relations from which latent, pervasive hostility emerges. After the murder of Abel by Cain, children of the first shepherd and first farmer migrate in opposite directions.¹¹

In this chapter I analyze the development of pastoralism in the ancient Near East, especially as it relates to the subsistence politics of the Hebrews and their experiences of enslavement in Egypt. In the first section I examine the social and ideological differences between hill and valley cultures. In the second section, I outline the importance of the pastoral symbolic complex for the Hebrew people in historical context between Egypt and the land of Canaan. In the third section I turn to specific pastoral metaphors of politics and political power, expanding and contextualizing the concept of pastoral power developed by Michel Foucault. Finally, I conclude by examining Hebrew and Mesopotamian ideology through several key creation narratives.

¹¹ Oppenheim, Ancient Mesopotamia, 82-83; Sauer, Man's Role in Changing the Face of the Earth, 56, 58; Schneidau, Sacred Discontent, 149, 139, 154; R. Grousset, The Empire of the Steppes, N. Walford, trans. (New Brunswick, 1970 [1939]), vii-ix; M. Sahlins, Tribesmen, 33-34;; T. Jacobsen, Toward the Image of Tammuz and Other Essays on Mesopotamian History and Culture, W. Moran, ed. (Cambridge, 1976), 114.

Hill and Valley

Across the ancient Near East, land use patterns made the development of pastoralism somewhat inevitable. With early Mesopotamian urbanism, the success of cities rapidly increased division of labor and its respective specializations. As densities of people and livestock increased, shepherds moved their herds further from the villages for pasturage, eventually detaching from settled areas more permanently. Later, as fields fell fallow with over-exploitation and salinization, widespread desiccation linked to global climate change created space for the development of extensive forms of pastoralism. As more land fell out of cultivation, it was converted to pastures for grazing livestock. In this way, the dynamics of pastoralism contain the same structural spiral as agriculture: wherever established, it requires obtaining ever more land and ever larger economies of scale. 12

From this perspective, the developmental trajectory of pastoralism is significant. Emerging on the periphery of agricultural settlements as a distinct compliment to urban life, pastoral ways of life differ from the former in requisite skill-set and temperament, but are fully interdependent forms of subsistence and social organization. Pastoralism develops amid agriculture and wilderness, with shepherds and farmers occupying distinct agroecological niches, namely, the hills and deserts of the hinterland and the cultivated fields and pastures of the river valley. Ecologically and economically, these landscapes and lifeways lay locked in hostile embrace, each fearing and needing the other.¹³

Regional pastoral groups were hardly homogeneous, and those who lived in the desert were especially feared by agrarian urban dwellers. From Egypt to Sumer, in fact,

¹² Adams and Jacobsen, "Salt and Silt in Ancient Mesopotamian Agriculture," 744.

¹³ S. Rosen, "Notes on the Origins of Pastoral Nomadism," 499; Halerpin, *Before Pastoral*, 95; J. Postgate, "Some Old Babylonian Shepherds and Their Flocks," *Journal of Semitic Studies* 20 (1975): 1-21; L. Beck,

[&]quot;Herd Owners and Hired Shepherds: The Qashqa'I of Iran," Ethnology 19 (1980): 327-351.

peasants feared the desert as much as they hated the savage nomads living there; across the ancient Near East, desert-dwelling nomads were depicted as savage, barbarian and even demonic. This sharp social, economic and mythological division of urban and rural, civilized and savage, was circumscribed by regional ecology. Egypt and Mesopotamia are regions of fertile, arable river valleys surrounded on all sides by barren, hostile deserts, mountains and seas; only their alluvial plains could sustain civilization. Once civilization began in the river valleys, the deserts and mountains flanking Egypt and Mesopotamia functioned as a gate and barrier; while crossable, only those with purpose and determination did so. Intruding into a wide variety of topographies and ecologies, then, the desert formed the ubiquitous geomorphic feature of cultural expression, simultaneously barrier and gate, refuge and prison, fertile and barren.¹⁴

In this sense, the social organizations attendant hill and valley cultures form two distinct horizons for subsistence politics. Between hill and valley, James C. Scott traces the ways hill peoples are often dispersed, mobile and relatively heterogeneous, while valley peoples are concentrated, settled and relatively homogenous; without the other, however, each is equally unstable and incomplete. Each form of subsistence is linked to different forms of cooperation, group size and settlement pattern, and together form "a kind of practical experience, or praxis, in several forms of social organization." In this way, the relationship of agrarian and pastoral societies turns on how hill and valley form natural partners, forever in conflict over different interests and worldviews, especially a resistance by the latter to sedentary forms of society. Central to nomadic ways of life is a mixed subsistence strategy, including foraging, shifting cultivation, hunting, trade,

¹⁴ W. Irons, "Nomadism as a Political Adaptation," *American Ethnologist* I (1974): 635-658; see also T. Barfield, *The Nomadic Alternative* (Englewood Cliffs, 1993); C. Shrire, ed. *Past and Present in Hunter Gatherer Societies* (Orlando, 1984).

husbandry and horticulture. Beyond the limits of the urban agrarian state, common resources such as pasture, hunting grounds and swidden fields allow people to thrive on their own, refusing large, permanent forms of social life. Living in what Scott calls "extrastate space," many such groups – though not all – have strong norms of egalitarianism and autonomy at the domestic and social levels to prevent forms of political hierarchy. As the quintessential hill peoples after the transition to agriculture, shepherds, herders and intermontane husbandmen represented a form of anarchic hybridity to the agrarian cities of the valley. 15

Apart from living in remote, marginal and otherwise difficult terrain, for example, pastoral hill peoples tend to develop subsistence strategies to maximize mobility and to resist appropriation by proximate agrarian peoples. Pastoral societies often have social mechanisms to facilitate fission and recombination according to need and circumstance, affording the ambitious no clear entry point to consolidate rule over them. Following Marshall Sahlins, Scott notes how often the social structure of nomadic pastoralists is marked by a lack of "nerve centers" that can be both "disaggregated and reassembled." The social organization of pastoralists, in other words, tends to involve an acephalous structure – or lacking a single ruler or figurehead – as a way to evade state appropriation. Rather than an evasion of the state strictly speaking, however, Scott emphasizes this is an evasion of the subject-status linked to its political and economic organization; what "peoples on the periphery of states [evade] is the hard power of the fiscal state, its capacity to extract direct taxes and labor from a subject population." Outlining a range of state-evading strategies typical of hill societies, he notes that while some display a degree of internal hierarchy, for many norms are reinforced by mechanisms to mitigate internal

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¹⁵ Scott, The Art of Not Being Governed, 210-211.

state-making as well, including proscribing permanent hereditary rank in marriage, cautionary tales about the downfall of overly ambitious leaders, and the tendency for families and villages to fragment and disperse when such inequalities threaten to become permanent. In this way, hill and valley thus represent complementary, interdependent agroecologies rather than totally contrary societies.¹⁶

In premodern Zomia (a Southeast Asian region typically beyond the reach of states), all states were, for impelling fiscal and military reasons, padi states; in practice, then, a necessary condition for the state was densely-concentrated settlement and irrigated wet-rice cultivation. Insofar as subjects grew the same grain in roughly the same way, communities were roughly homogenous, and the administrative tasks of setting land values and collecting taxes accordingly easier. As Scott shows with the Han, the patriarchal household was codified as the basic unit of property, thus only enhancing administrative social control. For padi state-makers, the ideal subject represented a vision of landscape and human settlement where the cleared plains of irrigated rice symbolized an ideal that was simultaneously cultivated and cultured. For Scott, in short, the proper way to understand this relation is to substitute "state-subject" for "civilized" and "not-a-state-subject" for "uncivilized.¹⁷

But agrarian state spaces are more vulnerable to instability during crises such as famine, plague or drought. Examining how states in premodern Zomia systematically coded mobility, dispersal and hill societies as barbarian, Scott argues that "the idea of civilization was in large measure an agro-ecological code," and that through "the indelible association of the valley state with fixed-field grain agriculture," subsistence

¹⁶ Scott, The Art of Not Being Governed, 330-331.

¹⁷ Scott, The Art of Not Being Governed, 327.

was placed along an evolutionary continuum with Han civilization, for example, as the metric. Certain forms of subsistence such as hunting and swidden cultivation were stigmatized, branding such practices a collective threat to the state. In this way, the idea of state legibility is already embedded in the concept of civilization, for all means of subsistence not accessible to state appropriation are labeled as "backward" or "primitive." Far from original, hill societies are "largely a reflexive product of state-making designed to be as unappealing as possible as a site of appropriation." Scott:

Just as nomadic pastoralism is now generally recognized as a secondary adaptation by populations wishing both to leave the sedentary agrarian state and yet take advantage of the trading and raiding opportunities it afforded, so is swiddening largely a secondary adaptation...The fugitive nature of its production frustrates appropriation.

The upshot, Scott argues, entails a return to the elementary units of hill society: hamlet, nuclear family, swiddening group. The malleability of such social units makes "poor raw material for state-making." Though they may coalesce into small confederations for war or trade, just as quickly they tend to lapse into more basic units. 18

Scott notes the symbolic and cosmological reach of the great valley states is vast and shallow, with nearly all concepts of legitimate authority beyond the level of a single village "on loan from the lowlands." The features of hill societies that facilitate state evasion – i.e., dispersal, mobility, heterogeneity, swiddening groups and egalitarianism – thus discourage unity and place huge obstacles to corporate organization and collective action. In many ways, lowland cosmologies are elaborated precisely to overcome social fragmentation and state evasion – for example, valley state ideology portrayed shepherds

¹⁸ Scott, The Art of Not Being Governed, 96, 101-103.

in terms of alterity to civilization, outside human norms and codes. Through this "distinctive legerdemain," Scott notes early state-makers managed three things: they described subjects effectively as "precivilized," they substituted imperial norms for colonial reality, and they conflated civilization with state-making. In this sense, Scott argues the "just-so" story of civilization "always requires a wild untamed antagonist, usually just out of reach," to be subdued, domesticated and incorporated into the state. As such, "civilization" is defined by a hypothetical negation that explains "why tribes and ethnicity begin, in practice, where sovereignty and taxes stop." Such stories proved considerably less convincing at the periphery, where the juxtaposition of real and ideal was sufficient for all denizens to conclude all such discourse illusory and instrumental. ¹⁹

Agricultural valley societies often incorporate narratives wherein pastoralists are figured as barely human "others" living beyond the orderly boundaries of civilization. In this sense, beyond the valley state was what Scott terms "an inappropriable landscape," a scene of rugged hills inhabited by nomads, rebels and saints. Through this overlay of topography and politics emerges an "agro-ecological code for state appropriation," the effective waypoints of which figure those unsuitable or inaccessible to the state as primitive, barbaric or otherwise beyond the pale of civilization. At least from the point of view of valley elites, then, there is a rapid relationship between life at the state periphery on the one hand, and primitive, backward forms of social organization on the other. In fact, from this framework for social intelligibility emerges an array of links between topography, subsistence and politics, including dwelling in forests and on hilltops, foraging and swiddening, scattered social organizations, physical mobility, and

¹⁹ Scott, *The Art of Not Being Governed*, 327-328, 331; see also P. Clastres, *Society Against the State*, R. Hurley, trans. (New York, 1987).

negotiable identities. Any activity that fails to support the state and temple is placed beyond the pale of civilization and culture. All these represent an earlier phase of social evolution for valley elites, with hill peoples and pastoralists pre-urban, pre-literate, pre-religious and so on. Yet Scott shows, if anything, pastoral and hill societies are better understood as post-agriculture, post-sedentary, post-subject and maybe even post-literate, representing in the long run "a reactive and purposeful statelessness," adapting to a world of states while remaining beyond their reach.²⁰

Central to hill peoples is an equivocal, ambiguous commitment to fixed identities and stratified social relations. While of hill people Fernand Braudel notes their "history is to have none, to remain always on the fringes of the great waves of civilization," for Scott it is more appropriate to say they have multiple histories deployed according to need and circumstance: "If they appear to be without a definite history, it is because they have learned to travel light, not knowing what their next destination might be." Such people are neither outside time nor without a history, but more like vagabonds "working the seams of the great trade routes and states." Agile and adaptive, they keep as many options open as possible, "and what kind of history to have is one of those options." In short, they have "just as much history as they require," thus putting a "premium on the adaptability of identities." While they have many connections to the state, they are never fully integrated into its lifestyle or ideology. Instead, they are located in the "shatter zones

²⁰ Scott, *The Art of Not Being Governed*, 335-337; see also C. Reid, *Slavery, Bondage and Dependency in Southeast Asia* (New York, 1983), 27; for more, see Price, R., ed. *Maroon Societies: Rebel Slave Communities in the Americas*, 2nd ed. (Baltimore, 1979).

located at the interstices of unstable state systems," where people change ethnicity and locality relatively frequently and according to need.²¹

The historical emergence of the Hebrews at the dawn of the Iron Age continues to be a source of scholarly debate, yet it is now generally accepted that the patriarchal narratives of Genesis recount the journey of one people among many in the great demographic shift between 1800 and 1700 B.C. The earliest patriarchal tribes depicted in Genesis lived in the deserts between Egypt and Canaan as semi-nomadic shepherds, herding sheep, goats and cattle, practicing small-scale shifting agriculture on a seasonal basis. While at times they lived on the periphery of cities, by and large they remained culturally separate. In this way, importantly, while evidence suggests semi-nomadism may have been part of the historical experience of the Hebrews, it is clear they were never actually "true" nomads. The very first lesson the Hebrews receive from Yahweh tells of their semi-nomadic origins, and their relation to a god whose solitude is matched only by his lack of earthly location. Unlike the localized, syncretized nature gods of Mesopotamia, Yahweh is a god of people rather than land; he is a "God of the Fathers" whose binding force holds his people together precisely despite mobility and lack of place. This focus on human lives – first an individual, and then through him an entire group – is a fundamentally different kind of theology, for it is through this god that the Hebrews are able to withdraw from human civilization with their humanity intact.²²

²¹ F. Braudel, *The Mediterranean and the Mediterranean World in the Age of Phillip II*, vol. 1, S. Reynolds, trans. (Berkeley, 1996), 36; Scott, *The Art of Not Being Governed*, 87, 327, 329.

²² Frankfort *et al.*, *Before Philosophy*, 47; J. Woodburn, "Ecology, nomadic movement and the local group," in Ucko, Tringham, and Dimbleby, eds., *Man, Settlement, and Urbanism*, 205; J. White, "Incorporating Heterarchy into Theory on Socio-Political Development," in *Heterarchy and the Analysis of Complex Societies*, R. Ehrenreich, C. Crumley and J. Levey, eds. Archeological Papers of the American Archeological Association 6 (1995): 103-123.

If Carl Sauer is correct that the ancient Near East was more pastoral than agrarian, the closest exception was surely the land of Canaan. The spring at Jericho, for example, appears to have been a place of reverence from very early, later becoming the site of the oldest known town. From very early, ritual burials of cave-dwellers at Mt. Carmel in present-day Israel link chthonic associations of Canaan with some of the oldest evidence for fertility cults at early Natufian sites. In this sense, Canaan was well-suited for Hebrew conquest, for its mythologies, cults and temples represented everything they were against. Less nature-oriented than most ancient Near Eastern mythologies, Hebrew ideology emphasizes the *un*natural character of divinity, with all important signs pointing away from nature – for example, the burning bush as a mask of nature, a simulacra as the face of nature. In fact, Hebrew religion deliberately severs the continuum of earthly and cosmic life; the divine appearance on earth not only entails a series of arbitrary signs, the arbitrariness is precisely the point. With despotic rulers, cities of whores and plagues of death, the Hebraic narrative is distinctly anti-urban, with cities portrayed as the symbol of self-interest and social injustice. Developing this rhetorical and political opposition to early cities, Hebrews elaborated an entire culture around a resistance to urbanism.²³

The benefits of urbanism were largely illusory, enjoyed by a small, privileged few compared to the majority drawn to urban security by various forms of dependency and duress. Yet as the wealth and prosperity of early Near Eastern states expanded, urban centers soon became a magnet for those with still larger ambitions. As king and army ravaged the countryside, in cities slaves erected the palaces, tombs and temples invoking epic megaliths of even older civilizations. Autochthony disintegrated into enforced

²³ Schneidau, Sacred Discontent, 134; A. Alt, "The God of the Fathers," in Essays on Old Testament History and Religion, R. Wilson, trans. (New York, 1968 [1929]), 55

allegiance to the state, as archaic reverence for sacred space deteriorated in the shadow of mighty urban achievements. Precisely as states emerge with institutional durability, then, social organization undergoes a "centering" around the city-state civilization and its ostensible permanence. In this regard, Schneidau points out how the law codes that emerge in the period are symptoms of "an enforced rather than engendered" social organization: while providing stability at first, they grow ideologically rigid as rulers imbricate themselves with the order of the cosmos. The urban ingathering of peoples thus affected the land in a double way: by concentrating populations it left large tracts of open, relatively uninhabited territory.²⁴

Beyond such external factors, however, the structures of early Near Eastern states contributed to their collapse. Shortly after they emerged, most Sumerian cities underwent a massive structural change, which included a renewed emphasis on militarism and the creation of new myths, epics and inscriptions depicting the conflicts among them. As the state and military bureaucracies became more efficient, they also became more rigid and hierarchical in terms of ideology and mythico-religious ritual. Early state belief systems are rigid precisely because they are imposed by rulers, rather than arising naturally among the population. Central in Mesopotamia, for example, was the idea that human society mirrored divine society, with the ziggurat the physical link between heaven and earth. For Lewis Mumford, this fusion of sacred and secular power was the ideological nucleus of the ancient "power machines" now known as cities. The frantic, haphazard attempts by Sumerian and Egyptian rulers to articulate a naturalistic ideology is thus tied to an acute anxiety about deviating from tradition, which led to mythological and political

²⁴ Schneidau, *Sacred Discontent*, 152-153, 140-141, 118-119; O. Lattimore. "On the Wickedness of Being Nomads," and "The Frontier in History," in *Studies in Frontier History: Collected Papers*, 1928-1958 (London, 1962); see also O. Lattimore, *Nomads and Commissars: Mongolia Revisited* (Oxford, 1962).

rigidity. The more insecurity they felt over their status, that is, the harder they tried to justify their way of life as a given natural norm to which all aim. Robert Adams notes that Sumerian cities had an "essentially artificial character," with the place name for *edin* — that is, the raised steppe between the Tigris and Euphrates rivers meaning "between cities" — carrying clear pastoral connotations.²⁵ The pastoral symbolic complex is directly opposed to this effort by demythologizing such narratives, declaring urban ways of life contingent and artificial. Neither nihilistic nor revolutionary, then, the pastoral complex aims not to destroy civilization, but to remind humanity that all cultures are fleeting, full of as many ends as beginnings.²⁶

Pastoral symbolism conveys the contingency of culture and the consequences for experience that result in a continuity of change. As Paul Shepard notes, pastoralism shares with hunting "the consciousness of a world not made by man, where the fragile tent and footprint in the sand are gone tomorrow." Both avoid the year-round toil of the agrarian life, as well as the coerced work of the commercial world, and so are unique in their means of providing subsistence without arduous labor. In this way, opposition between the figures of farmer and shepherd was neither simple ideology nor historical memory, but based on the dynamic experience of people. Between these contrasting ways of life, there is a sense of conflict that is both stimulating and threatening, relating civilized life to the violence of change, implying there is no creation without destruction.

²⁵ Adams and Jacobsen, "Salt and Silt in Ancient Mesopotamian Agriculture," 744.

²⁶ Schneidau, *Sacred Discontent*, 113-114, 156; R. Adams, "Patterns of urbanization in early Southern Mesopotamia," in Ucko, Tringham, and Dimbleby, eds., *Man, Settlement, and Urbanism* 742-744; E. Speiser, "The Biblical Idea of History in its Common Near Eastern Setting," in *Oriental and Biblical Studies* (Philadelphia, 1967), 190; L. Mumford, "Power Machines," in C. Kraeling and R. Adams, eds., *City Invincible* (Chicago, 1960), 7.

In this sense, it was the conflict itself that related civilized life to the violence of social change.²⁷

The contempt Hebrews felt to these cultures, then, was at least in part a response to the inverse relationship between worldly success and political durability. As great urban civilizations erected huge monuments, these awe-inspiring megaliths declared their founders autochthonous, born rooted in native soil and so natural and legitimate. And this is precisely what the Hebrews rejected. In this sense, it was already clear to all how the luxury and leisure of urban life required an imposition of power as the precondition for culture. And despite gaining tremendous psychosocial momentum from mythologizing this high-urban set of norms, over time nearly every early Near Eastern culture resulted in a maladapted ideology that withered soon after being cut from its roots in experience.²⁸

Milk and Honey

A central set of images in the Bible invoke pastoralism through metaphors of tents and wilderness, shepherds and sheep. In Genesis, for example, Abraham and his people are depicted through pastoral symbolism as peaceful nomads wandering in a land of surplus, sustained by "milk and honey" – two quintessential pastoral foods. When they depart for Canaan, then, they do so in conscious contrast to the fleshpots and bread of Egypt; yet they are afraid to enter this land when they arrive and are punished by God: "And your children will wander [yihiu ro'im] in the wilderness for forty years." Hazony notes, however, this is a common mistranslation of ro'im, which literally means "shepherds," thus transforming the divine decree: "And your children will be shepherds in the

²⁷ P. Shepherd, *Man in the Landscape: A Historic View of the Esthetics of Nature* (Atlanta: University of Georgia Press, 2002), 33.

²⁸ D. Halerpin, *Before Pastoral* (New Haven, 1983), 89, 91.

wilderness for forty years." It is significant that, while Genesis frequently refers to arable farming and husbandry, only the patriarchs are named as shepherds. Abraham was from Ur – literally "the city," one of the most sacred of the old Mesopotamian urban centers – yet he and his people construct their system of values out of deep dissatisfaction and distrust of cities. In this way, from Genesis there is the tradition of the shepherd leaving the city in search of pasture, while in Exodus there is the theme of fugitives wandering the wilderness under the challenge of being Chosen. Each portrays leaving civilization for the wilderness as a meaningful act.

The Hebrew tribes of Canaan thus lived in a pre-state society until the formation of Israel in 1050 B.C. Another overlap between Hebrew and Canaanite culture was their comportment to women. Practices of nomadic or semi-nomadic pastoralism reinforced these values by reaffirming social ties through a relatively simple system organized to manage conflict by segregating individuals; for example, Genesis provides a litany of conflicts mediated by physical and psychic withdrawal, a trope Claude Lévi-Strauss links to the final stages of shifting kinship patterns from which the clan and tribe emerged. Similar to Mesopotamia, as the Hebrew state in Palestine becomes increasingly powerful, the regulation of female sexuality tightens and women are increasingly excluded from public life. In the earliest period, patriarchs had undisputed power over members of the family; called ba'al, or master, by wives and servants alike, he was also ba'al of his house and fields. The Decalogue lists the wife among a man's property, along with servants, oxen and ass; fathers could sell daughters into slavery or prostitution. With the monarchy this right was restricted, while the patriarchal power over life and death was always limited. As with poor women in Mesopotamia, then, the key difference between

Jewish and foreign women was that Jewish daughters were not enslaved, which was the lot of foreign and conquered women. In line with generally lenient Israelite slavery, the female slave in Deuteronomy is released in the seventh year, as is the male slave, and must be furnished with supplies and animals from the master's flock. Overall, society is based on patrilineal inheritance and patrilocal marriage, in which a bride relocates to her husband's home.

Genesis offers some insight into the transition from matrilocal and matrilineal to patrilocal and patrilineal social organization. In the biblical narrative, matrilocal marriage is referred to as *beena* marriage, allowing wives greater autonomy and the right to divorce, which patrilocal or *ba'al* marriage abrogated. Israelite women were expected to marry, thus passing from the control of fathers (and brothers) to husbands and fathers-in-law; when the husband died prior to his wife, his brother or another male relative assumed control over her and married her. Although the custom of the levirate is frequently interpreted as a "protective" device for widows, it speaks most strongly to the male concern for preserving the patrimony.²⁹

Hebrews have new forms of politics as well as religion, the most important of which was a shifting locus from the tribe to the clan. The smallest social unit was the patriarchal family, and because cohesion and survival turned on strong tribal relations, several families formed a *mishpahah*, or clan, to cooperate in economic affairs and congregate for religious feasts and holidays. In the period of Judges between 1125 and

²⁹ D. Bakan, *And They Took Themselves Wives* (San Francisco, 1979), 94-95; Lerner, *Creation of Patriarchy*, 166-169; on slavery, see Numbers 27:7-8 and 36:6-9; on the law of levirate, see Deut. 15:12-13; on men leaving parents for wife, see Genesis 2:24; for Jacob and Laban as intimation of the transition from matrilocality to patrilocality, see Exodus 20:17; for the Deuteronomy Decalogue as a major departure, "elevating [the wife] from her former position of mere property," see J. Bewer *The Literature of the Old Testament* (New York, 1962 [1922]), 34ff.

1020 B.C., tribes only occasionally acted jointly, and inter-tribal alliances were generally weak. Authority was held by elders, from whom judges were selected in times of crisis. Any type of "national" consciousness was absent, with common religious and cultural traditions forming the social basis of tribal bonds. In this way, the semi-nomadic tribes of the Hebrews who conquered Canaan became sedentary in a sparsely-settled region with generally poor soil and scarce water, a difficulty which they overcame with technological innovations, including iron-lined cisterns, iron-tipped farm implements and the development of terracing to conserve water. As catastrophes of war and disease ravage early Hebrew clans, the needs for labor and the loss of people were both crucial to the formation of the basic principles of Jewish thought, and may explain its emphasis on the family and the procreative role of women, for under such demographic conditions women were likely to cooperate in a division of labor that gave the maternal role primacy.³⁰

Hebrew symbolism was strongly influenced by Mesopotamian traditions, in particular those of the land of Canaan. The principle divinity for Canaanites was a mother-goddess with a male serpent consort; the inversion of sense that accompanied Hebrew rejection of this cosmogony of life entailed their creation story departing significantly from earlier narratives. Rather than being the embodiment of temptation and evil, until the Hebrews the serpent was often a symbol of male virility, and closest to the earth a phallic representation of the masculine principle of creativity. In the story of the fall, all the symbolic elements of that previous heritage are dramatically transformed. In the biblical narrative of paradise there are two trees: the tree of life and the tree of knowledge. While reference to this second tree is in many ways ambiguous, in one sense

³⁰ Lerner, *The Creation of Patriarchy*, 164-165; C. Meyers, "The Roots of Restriction," *Biblical Archaeologist* 41:3 (1978), 95-98.

it suggests the trees have merged; since eating fruit from the tree of life is not forbidden, it is plausible to assume the two symbols have been unified. Later, however, Yahweh explicitly separates the trees again, expelling the first man and woman from Eden "lest he put forth his hand, and take also of the tree of life, and eat and live forever." In this way, the Biblical story figures the forbidden knowledge in two ways, namely, moral and sexual knowledge. When humans obtain knowledge of good of evil, they are then responsible beings, having lost their innocence and with it the ability to act correctly without moral consideration. Humans thus assume the burdens of distinguishing good and evil as a soteriological choice; the sexual knowledge is revealed after the fall when "they knew they were naked." Yet in both cases the consequences of sin are unevenly distributed on women: The consequence of sexual knowledge is to sever female sexuality from procreation. God puts enmity between snake and woman – or the things closest to earth – leaving maternity the only possible intelligible expression of female sexuality.³¹

The Biblical creation stories are tactically updated versions of earlier, polytheist myths from Mesopotamia. It is well-recognized there are two creation stories in Genesis that are in tension. While the first narrative (P) spans the seven days of creation from beginning to the end, the second (J) traces the creation from a more earthly point of view, focusing on Adam and Eve and the series of unfortunate events in the garden. Though it appears first in Genesis, the P version was transcribed several centuries after the J version. In the J version God creates Eve out of Adam's rib, while in the P version "male and female created he them." The P version parallels the Mesopotamian *Enuma Elish* in various details, including the order of events, revealing close historical and ideological

³¹ J. Campbell and B. Moyers, *The Power of Myth* (New York, 1988), 48; J. Campbell, *The Masks of Gods* (New York, 1964), 17; Genesis, 2.9, 3.7, 3.15, 3:19; Lerner, *Creation of Patriarchy*, 196; on eating from the tree of life is not forbidden Genesis 2:16-17; on divine identification of each tree, see Genesis 3:22.

links. Examination of the Mesopotamian myths shows how the Genesis versions tellingly shift the focus to male power. At the garden in this myth, the mother-goddess Ninhursag allows eight plants to sprout but forbids the other gods from eating them. When the water-god Enki eats them, she condemns him to die. With eight of his organs falling ill, a fox appeals to the goddess on behalf of Enki; she commutes his sentence and creates a special deity to heal each organ. When it came to his rib, she said: "To the goddess Ninti I have [given?] birth for you." In Sumerian, the word "Ninti" has a double meaning, namely, "female ruler of the rib" and "female ruler of life." In Hebrew, the word "Hawwa" (Eve) means "she who creates life," thus suggesting a certain fusion of the Sumerian Ninti with the Biblical Eve. So the choice of the rib may simply reflect certain incorporations of Sumerian myth, but Stephen Langdon suggests another fascinating possibility by associating the Hebrew "Hawwa" with its Aramaic meaning "serpent." To be sure, this tension may stem from the historical reality of Hebrew monotheism in the land of Canaan, where the principal divinity was a female goddess with her consort the serpent. With female gods (i.e., Neolithic, pagan, Greek) the serpent is closest to the earth and the male element is the source and element of evil. With male gods (i.e., Hebrews and Christians), the serpent is female and the source of evil. Here pictorial messages of affect and verbal messages of concept are in tension.³²

In this way, the Sumerian elements incorporated and transformed in the Biblical narrative are the eating the forbidden fruit, the concept of the tree of life, and the story of the flood; the description of the garden of Eden as a place bordered by four great rivers parallels the Sumerian garden of creation. Yet the divine originator of life in the

³² Chen, "The First Disobedience," 1267, 1261; M. Buber, *I and Thou*; W. Berry, *The Gift of Good Land* (North Point, 1981), 267-281; N. Hamilton, "Feeding our Future," *Nebraska Law Review* 72:210 (1993): 225-240.

Sumerian story remains the mother-goddess Ninhursag, and in Genesis there is the fathergod Yahweh, creator and lord of the world. And so while in one version of creation the God of the Hebrews may have created men and women at the same time, in both versions man is created in His image and woman another way altogether. This highlights female difference from the creative male deity. It is the creation of woman from the rib of Adam that has denoted the inferiority of women for centuries. Whether she is taken from one of his "lower parts" (i.e., ribs), or from his own flesh and bone – itself the creation of earth and divine breath – this passage is of profound significance for the history and meaning of patriarchal symbolism in the West. Although each is the work of divine intervention, the symbolism of Genesis figures sexual difference with Adam the namer created from earth and enlivened with the breath of God, and Eve created from part of the human body and successor to the ancient fertility goddesses. The fall of humanity reinscribes this sexual difference, for when they eat the fruit from the forbidden tree Yahweh condemns Adam to work with sweat on his brow and Eve to pain in birth and the raising of generations. Importantly, this punishment makes work a burden for man, but condemns to suffering not the work of women per se, but feminine sexuality in its specifically reproductive capacities. The punitive object, then, is the child-bearing body of woman, the female body and its generative potential. Genesis depicts paternity as the generative force for creation and procreation.³³

This emphasis on male creators would have significant consequences. David Bakan argues that when men came to understand conception as the result of sexual intercourse, they realized they possessed procreative powers that had heretofore been

³³ The J version appears in Genesis 2:18-25, P at Genesis 1:27-29; M. Horowitz, "The Image of God in Man – Is Woman Included?," *Harvard Theological Review* 72:3-4 (1979): 175-206. I. Kikawada, "Two Notes on Eve," *Journal of Biblical Literature* 19 (1972), 34.

reserved for the female divinity. Matrilineal replaced patrilineal descent, and female virginity thus became the central guarantee of paternity and its authority. Largely following Engels, Bakan adds that the major metaphoric device by which this was accomplished is the conceptualization of the male sexual exudate as "seed," a metaphor that attributes all the active and genetic endowments of intercourse to men and none to women. Interestingly, Bakan argues that this transition whereby men assume the role of provider and protector of children entails the "effeminization of the male." Ultimately, however, Gerder Lerner finds Bakan deterministic, ahistorical, and subjective. For Lerner, what is significant are the references to women as daughters born to men. The tenth century text attributed to J, for example, indicates the patriarchal conceptions of procreativity were already then well established. And while it is understandable that kinship relations in a patriarchal society are traced through the father, the point is that this metaphorical means of ordering kinships was somehow transformed into a counterfactual statement about reality: not only a tool in tracing lineage, it turned procreation into a male act with no mothers involved.³⁴

Yet there remained a tree in the garden. By expelling the first couple, God obviated the further temptation to acquire the knowledge of immortality, reserved to God alone. To aspire to divine knowledge is supreme hubris, the punishment for which is mortality; indeed, the implication is clear both in the prohibition of fruit and in the curse, "for dust thou art, and unto dust shalt thou return." Once and forever, creativity is severed from procreation. Along with immortality, creativity is reserved to God alone, and human procreativity to women. The curse for Eve made childbirth painful and female sexuality subordinate. Yet God is merciful, and in punishment there is redemption. There is yet

³⁴ D. Bakan, And They Took Themselves Wives, 27-28.

another side of the fall of humanity, for while God's curse of Adam ends with the assignation of morality, in the next line Adam renames his wife because "she was the mother of all living." The only immortality to which humans can now aspire is that of the immortality of generation.³⁵

The concept of original sin introduces the duality of nature: the opposites of life and death, good and evil, male and female, human and divine, free and slave. Life and death, men and women, good and evil are now central aspects of the human relationship to the divine. Through original sin, there is an act that joins eating and knowing into a kind of gustatory intelligence of good and evil. In this way, the first crime, the first transgression, occurs between eating and knowing. Adam and Eve disobeyed the first prohibition, and received the original curse:

And to the man he said, 'Because you have listened to the voice of your wife, and have eaten of the tree about which I commanded you, 'You shall not eat of it,' cursed is the ground because of you; and you shall eat the plants of the field. By the sweat of your face you shall eat bread until you return to the ground, for out of it you were taken; you are dust, and to dust you shall return.

The central tensions of these two accounts turn on alternative ways for humans to relate properly to nature. On the one hand, the first creation narrative sets the parameters for the so-called "dominion" ethic of agriculture, celebrating that which is won from the earth; humans must subdue and replenish, by force if necessary, the relationship of nature and culture. On the other hand, the second creation narrative suggests what is commonly called the "stewardship" ethic of agriculture, which lauds the simplicity, virtue and honor

³⁵ J. Calvin, *Commentaries on the First Book of Moses called Genesis*, J. King, trans. (Grand Rapids, 1948) 1: 129, 132-133; P. Trible, "Depatriarchalizing," 31, 42; Lerner, *Creation of Patriarchy*, 183-186.

associated with the agrarian life; life is relational and work is that which forms the redemptive connection between nature and culture. In this sense, in the first is an ethics of "I-It," while the second is structured by "I-Thou" relations; while in the first God is alone, by the second God shares in the phenomena of creation with people. When God notices the absence of man in the garden, he fashions humanity from the soil and places Adam in the garden to tend it. Both are ultimately romantic conceptions of agriculture; the first the romance of mechanical power, the second the romance of ecological power. Both embody a faith in the perfectibility of agriculture, and while Genesis contains elements of both, it primarily focuses on the imperfect and fallen nature of agricultural work. In this way, attitudes to agricultural urbanism were an offshoot of the symbolic tensions expressed in many ancient pastoral texts. Transmitting this ancient Near Eastern pattern to the present by way of the Mediterranean, it is not without irony that the ambivalence to civilization reflected in Hebraic literature has come in its contemporary context to be the symbol of culture itself. That the Hebrews are now often figured as the beginning of that culture simply known as "the West," in other words, belies a deep anxiety about civilization at the center of that intellectual tradition.³⁶

Despite these differences, however, early Hebrews likely shared many cultural traits with Canaanites, over which Egypt then enjoyed military hegemony. Canaanite wealth turned on a commercial agriculture common to Mesopotamian cultures, ruled by Egypt. The antiquity of chthonic Canaan was a defining feature for Hebrews: their sojourn there was one of constant struggle against the idolatrous temptations of the chthonic, naturalistic religion. Before the Canaanites, around 2300 B.C., the biblical people known as Amorites were only the latest to invade Syro-Palestine, and Jericho

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³⁶ Speiser, Oriental and Biblical Studies, 202; Schneidau, Sacred Discontent, 135, 141-142, 136.

bears witness to the many times it fell, each destruction giving rise to a new creation. For these semi-nomads, access to this land was enhanced by the penetration of the desert into the regions. The desert was defense and corridor, access and refuge, where pastoralists withdrew if necessary.³⁷

As a place where the Hebrews are shepherded from slavery to freedom, the desert is a potent symbol for Yahweh and the historico-metaphysical experience of the Jewish people. Yet neither is Yahweh a desert god, nor is the desert his home, for it is without place, unlocalizable. This unearthly landscape, rather, is appropriate to his own unearthly character. In this sense, between the history of experience and the experience of history, the desert emerges as a central social metaphor for Hebrew norms. According to Henri Frankfort, the agrarian peasant reverence for authority and the bondage the organized state imposes, means an intolerable lack of freedom for the pastoral tribesman; the farmer's concern for and total dependence on the phenomena of growth appear to the nomad as slavery. They are a people for whom "the desert is clean, but the scene of life, which is also the scene of decay, is sordid." In this way, Frankfort argues Hebrew experience was primarily metaphysical, a form of experience which can of course be more significant than the verifiable facts of history. Hebrews, he notes, lived "between the desert and the sown, between the most fertile lands and the total negation of life, which, in this remarkable corner of the earth, lie cheek and jowl." The withdrawal from urban-agrarian life thus entails a loss of the phenomenal world, for the nomad must live in the desert but not flourish there, its formlessness "wholly other." 38

³⁷ G. Mendenhall, "The Hebrew Conquest of Palestine," in E. Campbell, Jr., and D. Freedman, eds., *The Biblical Archaeologist Reader III* (New York, 1970), 103; S. Cole, *The Neolithic Revolution* (London, 1967), 58; K. Kenyon, *Amorites and Canaanites* (London, 1963), 76.

³⁸ Frankfort et al., Before Philosophy, 246-247; Schneidau, Sacred Discontent, 142-143, 144, 151.

This discontinuity of the desert with normal, everyday life presents the paradox of a concrete transcendence. Contrary to the Egyptians, the Hebrew god is not morbid or overly focused on death; rather, Hebrew mythology does not portray death as a negation of life, but attempts to demythologize the very powers myth deifies as birth, life and nature. For the Egyptians, however, death is the primary realm of mythical life, with death in many ways a positive mythologization of life. So while Ernest Renan famously related desert monotony to the development of monotheism, Schneidau is certain right to note how the complicated, ambivalent dynamics between early agrarian civilizations and the early pastoral complex contributed to the distinctive character of the Hebrew God and his singularly chosen people.

In this sense, sacred space is also experienced differently. Sacred experience for agrarian peoples is often marked by autochthonic, nativist ideologies, but the nomadism of pastoral peoples creates a different experience. Hebrew resistance to autochthony, for example, is inextricably linked to the nomadic sense of formal growth as something from which to be free. The connection of physical withdrawal and spiritual or political freedom, in fact, is reflected linguistically, with the verb "to leave" also translating as "to go free." Given their perpetual instability, by the late Egyptian and Babylonian empires urban autochthony degenerated into chauvinism with the petrification of mythological traditions. The social habits required by pastoralists functioned as a dynamic, agonistic force against the development of early urban civilizations, creating what Schneidau calls "a sacredness of spatial emergence" rather than continuity. The Hebrews bequeath to Western society "the pattern in which place-rootedness is relatively insignificant." To

domesticate cereal grasses such as wheat and barley, their wild progenitors were removed from native habitats and forced into artificial growth patterns through transplantation.³⁹

Crook and Yoke

Throughout the ancient Near East pastoral symbolism was ubiquitous. Early Egyptian pharaohs adorned their regalia with a cattle whip and the crook of a shepherd. Not only is the crook the earliest insignia of pharaonic power, it is among the main sources of the Egyptian verb "to rule." According to Paul Halerpin, regardless of whether it was divine mediation or secular protection, the fusion of pastoral metaphors to political power was accomplished quite early. A Sumerian poem on the divine transfer of civilizing arts to humanity, for example, figures the office of "shepherdship" between "the exalted throne" and "kingship." As in Egypt, in Sumer the crook was central to state iconography. In this way, long before Homer bestowed the appellation on Agamemnon or Plato inquired into the political metaphor, the image of ruler as shepherd was ubiquitous across the ancient Near East and Egypt. It was also common to figure the ruler-shepherd as enforcing peace, forcefully compelling subjects to lie down together in the pasture. When the Hebrew prophets reject their kings as "bad shepherds," the clear implication is that they are indistinguishable from other despots. The Hebrew God thus dethrones the mighty and elevates a shepherd-boy to king of the Jews, conqueror of those intent on enslaving his people. Regarded with utter contempt by sophisticated urbanites, even as an advisor to Pharaoh, Joseph was forced to eat alone because Egyptians refused to share a table with

³⁹ L. Horowitz, "Temporal and Spatial Variation in Neolithic Caprine Exploitation Strategies," *Paléorient* 29:1 (2003): 19-58; Sauer, *Agricultural Origins*, 137; Rosen, "Notes on the Origins of Pastoral Nomadism," 504; Schneidau, *Sacred Discontent*, 121; J. Hawkes, "The ecological background of plant domestication," in Ucko and Dimbleby, eds., *Domestication and Exploitation of Plants and Animals*, 29.

such an uncivilized rustic. By the time of the early Christian texts, the divine birth recapitulates creation, only now the divine flesh is earthly, at one with the *logos* and announced to shepherds keeping watch of their flocks at night.⁴⁰

Like other ancient Near Eastern states, Egypt used enslaved peoples in the intensifications necessary to build their respective civilizations. Most of the slaves in Egypt were captives taken in war. In this sense, enslaved labor is the basis of economic development, it is the gift of surplus necessary to initiate a certain type of development, i.e., economic growth. All ancient Near Eastern societies were overwhelmingly agrarian, with eighty to ninety percent of the population working the land, and a political system based on the control and management of farming. In such a system, enslaved labor works to separate the toil and risk of investment from production and profits. Moreover, the mythico-cultural ideologies of these societies were based on a distinctly agrarian social experience centered on the annual farming cycles and the fears that pose an existential threat to the stability of that world, including natural forces of flood, storm and drought, as well as social forces lurking between the orderly plowed furrows of grain fields and the anarchic peoples living off the land on the borders of culture and anarchy.⁴¹

By the time of Abraham, the Nile and Euphrates had been harnessed for more than a millennium, making possible the great Babylonian and Egyptian states that used huge numbers of temporary slaves for massive public works projects. Such enforced rule was figured as a form of taxation supporting the large coercive mechanisms capable of impressing the multitudes into service, and defending public works against nomads who

⁴⁰ H. and H. Frankfort, J. Wilson, and T. Jacobsen, *Before Philosophy* (Baltimore, 1961), 88; Halerpin, *Before Pastoral*, 100-101; S. Kramer, *The Sumerians* (Chicago, 1963), 100.

⁴¹ Flannery and Ken, *The Creation of Inequality*, 413; C. Eyre, "The Agricultural Cycle, Farming, and Water Management in the Ancient Near East," 175-189; see also "The Water Regime for Orchards and Plantations in Pharaonic Egypt," *Journal of Egyptian Archaeology* 79 (1993).

coveted the wealth accumulating in the river valleys. While the Hebrews were long ambivalent – even hostile – to the great urban cultures of the Near East, most date their exodus from Egypt to the reign of Ramses II, another great state-builder. During this time the increasing prevalence of foreign-born workers in state offices and court – mostly from the Semitic populations of Syro-Palestine – heightened Hebrew disdain for the Egyptian state. Most Egyptian slaves were war captives, with many coming from the culturally distinct hill peoples of the great desert cultures. When the Hebrews enter Canaan under Joshua, then, they already identify as enemies of the Canaanite city-states. After settling in a landscape where Canaanite chariots could not run, Hebrews soon found themselves at a geographical bottleneck, at the mouth of a strategic funnel through which all aspiring conquerors of the then-known world had to pass. 42

By the late Bronze Age, the land of Canaan – encompassing present-day Syria and Palestine – was the main source of Egyptian slaves, many of whom where conveyed in caravans of donkey or the recently domesticated camel. Most of Canaan was cultivated with native forced labor, taxed to support Egyptian temples, garrisons and administrative centers built by imperial domination. There was also a structural similarity between Egypt and Canaan in the way land was owned and distributed. So when the Hebrew authors of the Pentateuch distinguish themselves from Egyptians, they are doing so for Canaanites too, both of which were central aims of the early Hebrew texts. 43

Pastoral symbols and values were thus central to ancient Near Eastern cultures, including Egyptian, Assyrian and Hebraic. For the Hebrews, however, the shepherd is of

⁴² Schneidau, *Sacred Discontent*, 107-112, 115; D. Davis, *The Problem of Slavery*, 64. W. Hallo and W. Simpson, *The Ancient Near East* (New York, 1971), 275-78, 276; Flannery and Marcus, *Creation of Inequality*, 413; Scott, *The Art of Not Being Governed*, 87.

⁴³ E. Davis, *Scripture, Culture, Agriculture*, 68 and note 9; I. Arieh, "New evidence on the relations between Canaan and Egypt during the Proto-dynastic period," *Israel Exploration Journal* 34 (1984): 20-23.

unique significance, for the relationship of God to humanity is figured as if a shepherd to flock. While the gods of Canaan are terrestrial – privileged in temple and town – the Hebrew god wanders from place to place. In contrast to power exercised on a unity of territory, then, pastoral power is exercised on "a multiplicity on the move," the character of which would prove particularly useful in the cosmopolitan context. In fact, political power is founded on the non-territoriality of pastoral power. Importantly, only the relation of God to his people is defined by pastoral relations; no Hebrew king except David – the founder of the monarchy – is explicitly named as a shepherd. Yahweh chose Moses to lead his people to Israel because he was a good shepherd in Egypt, leading his sheep to new pastures so all would be fed; as Foucault notes, Moses presided over this just, calculated and reflected distribution of food, which led Yahweh to say to him: "Since you know how to pity the sheep, you will have pity for my people, and I will entrust them to you." Bad shepherds squander, disperse and otherwise dissipate the herd; they are unable to feed and care for the flock, and unable to return it home. Pastoral norms for good shepherding concern the whole rather than the parts; shepherds exercise control over many sheep in motion.

In this sense, Foucault notes, pastoral power is above all a beneficent hegemony. This singular focus marks off pastoral power from other forms of power defined as much by omnipotence as beneficence. Pastoral power, in other words, is "entirely defined by its beneficence," for its only aim is for the flock to survive and thrive. Salvation is subsistence; the means of subsistence is good pasture, sufficient food. Shepherds are those who feed, or at least ensure animals eat and are properly fed. Pastoral power, in short, is a power of care. The office of the shepherd is not primarily one of honor, but

burden and effort; he directs care to others more than to himself, and on this basis judgment of his character is made. Bad shepherds only think of good pasture for their own profit, for by fattening the flock and selling them to scattered places he departs from the role of good shepherd. For Foucault, in the figure of the shepherd there

is the appearance, the outline, of a power with an essentially selfless and, as it were, transitional character. The shepherd serves the flock and must be an intermediary between the flock and pasture, food, and salvation, which implies that pastoral power is always a good in itself.... Pastoral power is an individualizing power. That is to say, it is true that the shepherd directs the whole flock, but he can only really direct it insofar as not a single sheep escapes him.

Thus, the pastoral paradox of the shepherd: On the one hand, the shepherd must watch all and each sheep, *omnes et singulatim*; on the other hand, in the face of danger his sacrifice creates a problem wherein the shepherd must give his life for the whole flock, or sacrifice the whole flock for individual sheep. This form of power is not directed at an abstract power like the state or "the people," but individuals. In this sense, pastoral power is power exercised on a multiplicity rather than a territory; it is a power that guides toward an end and functions as the means to this end. It is thus a power with a purpose for those to whom it is applied, and not a purpose for a kind of higher unit like the city, state or sovereign. In short, it is a power directed at each in paradoxical equivalence rather than the higher unity of whole. 44

In a striking departure from narratives before and after, the central Hebrew characters are shepherds rather than heroes of noble birth. After the divine creation of man and the birth of woman from his body, and their temptation, fall and expulsion from

⁴⁴ Foucault, Security, Territory, Population, 136. Foucault, Security, Territory, Population, 124-129.

Eden, the biblical narrative recounts the first murder of the first shepherd by his brother, the second farmer, after God chooses the pastoral offering of an otherwise complacent man. At the behest of God himself, the first Jew – Abraham – leaves his urban birthplace of Ur to take up the nomadic life of a shepherd; later, God commands Abraham to sacrifice his son Isaac only to offer a ram lamb instead just before the knife falls. And while Jacob raises his sons as shepherds, his beloved son Joseph can dream of nothing but grain; and yet even after his brothers jealously sell him into an Egyptian caravan – where shepherds are detested as an abomination – Joseph nevertheless rises to power and rescues his people from starvation. Moses, raised in the palace of Pharaoh, ultimately flees into the desert as a shepherd, only to be called by God while tending his flock to return to Egypt and confront Pharaoh with but the staff of a shepherd in hand. Though Moses frees the Hebrews enslaved there, only the blood of a slaughtered sheep smeared above their doorway was sufficient to signal the true people of their deliverance from bondage. Leading the Hebrews from slavery, Moses brings them to Sinai, where God appears in the sound of a ram's horn, the *shofar*, which also symbolized the conquest of Canaan by Joshua.

The shepherd is thus a liminal figure, moving between worlds, exposed at once to beasts and wild animals, yet bound to urbanism through a form of necessary contingency. At the limits of nature and culture, pastoralists perform an essential mediating function between the human community and the supernatural, divine powers at work beyond the city walls. Some scholars, in fact, suggest this is why shepherds acquire religious prominence in the ancient Near East: They become inhuman by moving in two directions simultaneously, to the natural, animal world on the one hand, and to the supernatural,

divine world on the other. While living at some remove, shepherds were nonetheless integral to economic exchange between urban and rural areas, while pastoral nomads are constantly moving from place to place, grazing their animals on uninhabited ranges with no form of agriculture at all.

The results of pastoral resistance in the ancient Near East were multifaceted. Oppenheim notes how patterns of pastoral withdrawal in the face of state expansion and appropriation worked to encourage urban imperialism. The most effective means for preventing the dispersal of population was colonization, both internal and external, which only the most powerful states could accomplish. Royal inscriptions triumphantly reference kings affecting an "ingathering of the scattered," resettling them on new land where he forced them to dig canals, build cities and, above all, till the soil to sustain his sovereignty. Though pastoral motifs draw affective and political significance from what is now known as "civilization," the pastoral register often depicts the contingency of such forms of social organization. As Herbert Schneidau notes, "[c]ulture means growing – too many things growing to suit nomads. No wonder for them the pullulating life of the floodplains was 'sordid' and 'a scene of decay." Opposed to city, the shepherd reminds civilization of its own fragility and violence, questioning culture in the order of things. In this sense, Schneidau argues, for pastoral symbolism nature is not the antidote to culture precisely because it emphasizes the sense in which urbanism was already integrated with nature through agriculture. Rather than anti-urban, the city is an agricultural creation.⁴⁵

⁴⁵ Oppenheim at Scott, *The Art of Not Being Governed*, 335, n 18; Schneidau, *Sacred Discontent*, 128.

Wilderness and Resistance

In this way, the opposition of farmer and shepherd is an opposition to urbanism and agrarian values. Rather than the farmer, the shepherd symbolizes this contrast because – at least prior to urban imperial expansion – the larger, denser cities were no more than burgeoning agricultural centers anyway. Nomadic and semi-nomadic pastoralists were outside these cultures, rebuking the corrupt complicity of farmers with the commercial order of civilization; the Hebrews, in fact, opposed this order by using the name of their detested neighbors, Canaan, as a term for merchants. Yet the very same pastoralists were intimately involved with the agrarian cultures they scorned, for not only were domesticated animals coeval with domesticated grains in the agricultural transition, but original and absolute pastoralists never even existed. As such, the social division of labor between farmers and shepherds has no fixed, decisive origin, but instead reappears time and again in what Herbert Schneidau describes as "a fissiparous tendency in the fluid evolution of culture." In this sense, it is entirely possible that distinct groups separated sufficiently early to establish separate traditions within the ancient Near East identified with one way of life over the other, as by the time of the early Sumerians the trope is already well-established in mythology and practice. A recurrent theme, for example, links city welfare to the harmonious social interdependence of farmer and shepherd, with the chief Sumerian shepherd god, Dumuzi, also the incarnation of sheep fertility.

Regardless of historical origin, then, the antithesis of farmer and shepherd is most significant as a symbolic register concerned with memories and traditions opposed to proximate agrarian groups. The shepherd becomes a vital signifier of independence, autonomy and critical distance from the necessary exploitation of urban societies and

political hierarchies. The Hebrew vision of the world penetrates this façade, exposing the mortality and vanity of human ambition. Indeed, even King Solomon doubted whether the divine would dwell in a house built by men. According to David Brion Davis, the Hebrews were some of the first people to figure God as a noble, benevolent master who might deign to guide and protect the lowliest of slaves. Theologically, the divine will in the world aim to free men from bondage only to bind them to another, higher master.

The story of Cain and Abel is a particularly telling indication of the Biblical attitude toward pastoralism and agrarianism. After the fall of humanity and the birth of the children of Adam and Eve, the murder of Abel by Cain is the first thing on which biblical narrators report. Thus, after the plenitude and leisure of the garden are gone, this original crime is a kind of prelude to all of history. The first shepherd is a just man killed by his brother. The second farmer – also the first murderer – is linked to arts and crafts, and after his lawless wanderings founded the first city. The murder suggests that jealousy and competition for resources will be the defining features of post-lapsarian civilization. With great hardship and suffering humanity is cursed to work the ground that yields the grain of daily bread. In the divine curse that is agriculture there is a certain bitterness over being condemned to live by way of farming. In fact, the soil itself is "cursed," transforming into a sort of master itself, dictating the rhythms of daily life yet always in the shadow of death and the cycle of dust returning to dust. The bitterness of farming is aptly expressed in the Hebrew la'avod et ha'adama, which Hazony translates as "to work the ground." To work, *la'avod*, also means to serve, with God punishing man "to serve the ground" – to be slave to the earth.

The brothers Cain and Abel represent contrasting lifestyles. Eve bears two children: "Abel became a keeper of sheep, Cain a worker of the ground [oved adama]." In time Cain sacrifices to God the "fruits of the ground," and Abel follows him by sacrificing the firstborn of his flock. God accepts the lamb but rejects the grain; in shame Cain murders Abel and buries him in the ground. God then curses Cain, who flees to the east where to found a city called Hanoch. 46 As Hazony notes, on the face of it this story makes little sense: Why does God not reject the sacrifice of Abel, for the text is clear it is Cain who suggests the sacrificial offering in the first place? In any case, Cain is the brother inclined to piety, taking a part of his meager grain stores, scraped from the soil, to praise God; Abel only follows him. God appears to be punishing Cain for doing precisely as he commanded – to eat grain by the "sweat of thy brow." Cain does this, submits to the will of God, giving thanks to his beneficence in the midst of the curse of toil. What is more, God has not yet said a word about shepherds; prior to this God has commanded only three things, namely, to master and multiply the earth, to till and preserve the garden, and to refrain from eating the fruit of the tree of the knowledge of good and evil. So when Abel takes up pastoralism he takes up an activity God had not sent man to do. This is implied by the Hebrew, "Abel became [vayehi hevel] a keeper of sheep" – he turned into a shepherd whereas Cain remained true to his familial agrarian vocation. For Abel the ground is indeed cursed, with subsistence possible only if he serves the ground. Yet sheep to some extent care for themselves outside of human toil, and if man kept sheep he might free himself from slavery to the cursed earth. In this way, Abel finds a way to escape divine punishment, and so escape the curse of agriculture. Thus despite the

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⁴⁶ In Semitic languages Cain means "smith," intimating he may have descended from the Kenites, nomadic metal workers for whom Moses worked as a shepherd, and from whom he learned Yahwism; Hazony, *Philosophy of the Hebrew Scripture*, 107.

text's explicit insistence that the agrarian way of life is inevitable for men, it suggests that the seemingly easier and less labor-intensive way of life is blessed.⁴⁷

The narrative of Cain and Abel presents two archetypes that occur repeatedly in the biblical texts, each symbolizing a way of life as well as a form of community. It is thus between ethics and economics that a rather stark dilemma emerges – that the choice of God, i.e., the *right* choice, is not necessarily the one most individuals would choose. As a farmer, Cain accepts the divine curse and works with duty and obedience as his father before him; within this moral economy, Cain offers the little he has to praise God. The life of the farmer thus entails pious submission, obedience to traditional customs, handed down to provide the only bread capable of sustaining life. On the other hand, shepherds see the "cursed" soil as an earthly fact, neither attributing special merit to it nor recognizing it as a legitimate origin of authority. The opposite of submission and obedience, then, is the rejection and resistance of the shepherd. Risking the anger of God and man, Abel improves his life and that of his family with ingenuity and bravery. Dissent, risk and initiative represent the life of the shepherd, whose aim is the good life for man, presumably the will of God. 48

In the story of the tower of Babylon these themes appear in concentrated form. In the most important city in the Euphrates basin, the rulers decide to gather all of humanity in a single city with a single language and a single aim, the conquest of heaven. As such, the life of the city and state are for biblical narrators the natural extension of the agrarian life; all the virtues of Cain – submission, piety, sacrifice and honoring tradition – are

⁴⁷ M. Fishbane, *Biblical Text and Texture* (Oxford, 2003 [1979]), 25-25, 31. Hazony, *Philosophy of the Hebrew Scripture*, 308, note 25; for the prior commands, see Genesis, 1.28, 2.15 and 2.16, respectively. ⁴⁸ Rousseau makes virtually the same distinction, and reads them as appearing in the biblical story of Cain and Abel. J.-J. Rousseau, "Essay on the Origins of the Languages," in V. Gourevitch, ed., *Discourses and Other Early Political Writings* (Cambridge, 1997), 271-272.

perfected in the great cities and empires. Likewise, all the virtues of Abel – dissent, resistance of authority and innovation – are all anathema to the god-kings of urbanity. From the hills around the state, the nomad views civilization from the outside as he blazes his own independent course through the wilderness. In this sense, the most precious aspect of the pastoral life is independence: political independence with a nomadic life, ungoverned, unregulated and untaxed; ethical independence in one's vantage point and freedom to pursue what truly matters. In short, Biblical authors figure farmers and shepherds as contrary categories, two ethical categories that have struggled since the creation of the world.⁴⁹

In this sense, while God did not intend for humans to become shepherds when he cast Adam and Eve from Eden, as a way of life a greater goodness and improvement is possible through effort. Having said nothing of the subject previously, after rejecting Cain God explains: "Why are you angry, and why is your face fallen? If you improve [teitiv], will you not be lifted up?" God thus accepts the offering of a man aiming to improve, to make them good by his own initiative, which is why he accepts the sacrifice of Abel. Similar to elsewhere, here God is not especially impressed with piety, sacrifices or doing as your father did before you; in fact, he does not appear all that impressed with those who do as God himself decreed, for all these things can be part of an animal life, or even evil, worth nothing if not placed in the service of an active pursuit of the true good. And so the first shepherd is killed by the second farmer, who is then cast out and builds the first city. As Hazony notes, this link of town and country, rooted rural provincialism

⁴⁹ Hazony, *The Philosophy of the Hebrew Scripture*, 108-109; J. Flight, "The Nomadic Ideal in the Old Testament," *Journal of Biblical Literature* 42 (1923), 213-226; J. Levenson, *Sinai and Zion* (New York, 1985), 19-23; on improvement, see Genesis 4.16-17, 4.1-8; for Moses and Egypt, see Exodus 12.3-11, 21-23; J. Bottéro, *Mesopotamia*, Z. Bahrani and M. van de Mieroop, trans. (Chicago, 1992 [1987]), 1-2, 48; on Babel, see Genesis 11.1-4; Genesis 43.32, 46.34

and uprooted urban cosmopolitanism, is significant insofar as the city is the ultimate fruit of the farmer; with its extraordinary concentrations of wealth and power, it is the logical result of the farming life associated with Cain.⁵⁰

Many readings of the Hebrew scriptures figure the God of the Pentateuch as little more than authoritarian, dispensing law through an elaborate theology of command. By contrast, these readings suggest a much more nuanced view of godly authority. Hazony argues that from Adam and Eve to Cain and Abel, from Noah and Ham to Joseph and Pharaoh, the commands of God are either supplementary to, or in themselves an expression of, a fundamental moral law deriving from the nature of things. What is more, men ought to be capable of discerning this law – at least in its contours – without explicit instructions from God. On this view, of course, Biblical ethics is based on a form of natural law, which Hazony suggests cannot be understood without recognizing the key function of the shepherd metaphor. Farmer and shepherd represent two different kinds of ethics that repeatedly come into conflict, yet with Cain and Abel the shepherd emerges as an ethical preference, as if beyond all the laws God hands down to humans. In this sense each of the covenants must themselves be situated in a context of this prior *comportment*. Not only with Cain and Abel, but Abraham and Joseph too, farmers provided the labor to erect the great cities; with obedience and piety farmers followed father and king in rituals prescribed by state priests. Grain, obedience and authority held the state together, then, and obeisance to the gods brought goodwill and justice in this world and the next. Across the ancient Near East, the political ethics of action were ultimately aimed at maintaining the state precisely because all goods were figured as circulating through it; anything that

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⁵⁰ Hazony, *The Philosophy of the Hebrew Scripture*, 104, 129; on Abraham and Ur, see Genesis 4.10-12; on natural law see D. Novak, *Natural Law in Judaism* (Cambridge, 1998).

maintained the synchronic social system of farmer, tax collector, soldier and priest was *prima facie* good by keeping the state in motion and governing its masses of people.⁵¹

To make sense of Hebrew ethics, then, involves recognizing the novel perspective from which human action is evaluated. Associated with the nomadic life and a people who observe the world from outside mainstream ancient Mesopotamian culture, pastoral ethics cannot derive from the state precisely because humans can live a good life beyond its walls and outside its social relations. God commanded Abraham, for example, to leave the city of his birth, Ur, and take up the life of a shepherd in the wilderness, suggesting a pastoral ethics that begins with human life independent of politics and state – or, rather, it begins with the human family and the adult man responsible for their fate. In this regard Hazony notes that, if the state can facilitate man fulfilling his obligations, its apparatuses and laws have purpose; yet if the state cannot serve this end, it no longer can assert a claim to his body or action. The upshot, Hazony argues, is that within the biblical narrative of Israel, obedience to the state is justified on ethical grounds alone, if at all; pastoral ethics, that is, rejects a central tenet of ancient Near Eastern political philosophies, namely, that ethics derive from politics. Instead, the Hebrews figure ethics as the foundation of social life, from which politics develops. Pastoral ethics, then, begins with what individual man – as patriarchal head of household – must do to improve his station in life, as well as that of his family. In contrast to other ancient Near Eastern traditions, the God of Israel cares about piety and virtue only insofar as they are in proper measure at the proper time and place. Against the rote ritualization of ethical life, the

⁵¹ Hazony, "The Jewish Origins of the Western Disobedience Tradition," *Azure* (1998), 17-74.

Hebraic God now turns inward to concern humans with their own interests and those dependent members of the household. 52

⁵² Hazony, *The Philosophy of the Hebrew Scripture*, 133-134.

CONCLUSION

ECOLOGY AND EQUALITY

From an ecological point of view, it seems as if the natural environment for slavery is an intensive agrarian society with low population densities and an abundance of land. In the absence of effective means of coercion, high levels of resource abundance often induce groups with lower population densities to disperse across the landscape to feed and govern themselves rather than work the land of others. As early as the mid-nineteenth century, E.G. Wakefield identified the general contours of this relationship by arguing the low price of land in the British Atlantic colonies was the primary reason for the scarcity of labor there. Later, Achille Loria articulated a slightly more precise version in the context of French Atlantic colonialism: wherever surplus land supports low-capital intensive cultivation, slavery is the only means to secure labor beyond subsistence.

By the turn of the century, H.J. Nieboer developed a stronger version supported by empirical data; insofar as all arable land is occupied, he argued, slavery is inconsistent with land scarcity, while slavery "can only exist to a significant degree where there is still free land." Nieboer predicts slavery will exist to a significant degree, then, only where land or any other critical resource exists in relative surplus to labor; individuals will not work for others if alternative subsistence is possible, for without slavery or other forms of bondage only the privation of food is sufficient to compel labor for others. In what is now known as the "Nieboer

hypothesis," the introduction of slavery as an "industrial system" correlates to a abundance of open, underdeveloped resources where subsistence can be secured with little capital.¹

More recently E.D. Domar modified the Nieboer hypothesis based on Russian serfdom, noting how the simple land to labor ratio is insufficient to account for the role of central states and political hierarchies in surplus extraction. His aim is to explain the origins of serfdom and slavery – which he treats as interchangeable – Domar argues the low price of land caused the peasant migration from the land in the seventeenth- and eighteenth-centuries, thus leading to a labor crisis for the ruling class. Domar argued only two mechanisms would mitigate this dynamic: on the one hand, landed elites needed full private property rights to land to create the incentives for improvement and increased productivity; on the other hand, the right of movement for peasants must be limited – indeed proscribed – and this required a strong central state. As land becomes increasingly scarce, however, the marginal productivity of labor remains at levels sufficiently high to require the social relations of serfdom to secure the necessary labor, even as political mechanisms may be necessary to reinforce what is otherwise an economic necessity.²

Ultimately, however, the relations between slavery and land are highly complex, and as succinct as the Nieboer-Domar hypothesis appears, a range of recent scholars have undermined its premises and conclusions. In fact, recent scrutiny reveals no significant correlation in the ratios of land and labor to slavery, which is patently obvious if only because slaveries develop and are sustained in different societies for entirely different ends. That said, beyond any causal relationship the comparative ethnological data does reveal certain suggestive intersections of

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¹ E. Wakefield, A View of the Art of Colonization (1849); A. Loria, Les Bases Économiques de la Constitution Sociale (1893) cited in O. Patterson, "The Structural Origins of Slavery," Annals of the New York Academy of Sciences 292 (1977): 12-32; H. Nieboer, Slavery as an Industrial System, 306, 347, 348.

² E. Domar, "The Causes of Slavery or Serfdom: A Hypothesis," *Journal of Economic History* 30:1 (1970): 18-32; M. Weber, "The Social Causes of the Decay of Ancient Civilizations," in *Theory of Social and Economic Organization* (1964): 276-77; J. Goody, "Slavery in Time and Space," in *Asian and African Systems of Slavery*, J. Watson, ed. (Berkeley, 1980), 23.

slavery with subsistence strategy. Again, not only is slavery almost wholly absent among foragers, fully half of intensive agriculturists practice some form of enslavement. By contrast, for groups subsisting by "incipient," or proto-agriculture, the percentage holding slaves falls below twenty-percent. Finally, while more than thirty percent of fisher cultures have traditions of slavery, seventy-three percent of pastoralists are known to trade in human booty. In this way, while monocausal explanations are clearly insufficient to answer the question of causality, this data suggests rising economic complexity does coincide with increased social inequality.³

For example, slavery is not simply correlated with population density, but to the type of agriculture and its specific labor needs. For example, there is a positive but weak correlation in the degree of agrarian dependency and structurally significant slavery. A stronger relation emerges, however, when the controlling for the type and intensity of agriculture; perhaps most striking is the correlation of slavery and non-irrigated forms of intensive agriculture, where the practice is present in forty-eight percent of societies. Controlling for crop type also reveals a marked rise in the relationship of slavery and agriculture; in those societies where arboriculture and/or viticulture prevail, the incidence of slavery is high, whereas cereal agriculture and slavery have a negative correlation.

But economics is always already cultural too. Among recent resuscitations of the Nieboer-Domar hypothesis, the emendations of F. Dorving are perhaps the most subtle and insightful. Whether real or imagined, for Dorving the shortage of labor induces economic elites to introduce bondage on subjugated peoples. The dynamics of Russian serfdom and slavery were not entirely economic, but the result of critical social, political and economic dynamics at work within historical human experience. According to Patterson, the key insight of Dorving turns on

³ S. Engerman, "Some considerations relating to property rights in man," *Journal of Economic History* 33 (1973): 43-65, esp. 60-62; Patterson, "Slavery," p. 433. Murdock's *Ethnographic Atlas* (1966); Lerner, *The Creation of Patriarchy*, 26; Patterson, "Structural Origins of Slavery," 12-15.

how the servile system may have generated the very labor problem it aimed to solve. Cultural norms about the proper standard of living for peasants, that is, created a context in which rent artificially increased whenever peasants increased income with their own labor; without incentives for the improvement of peasant cultivation, many simply migrated to increase the prospects of raising their condition. Dorving departs from the reductionism of Domar by suggesting an intermediate variable in the cultural context of slavery.⁴

In this way, the form of agriculture, the practice of enslavement and ideologies of slavery develop in tandem. In short, surplus makes slavery possible, especially for elites, who are likely to hold slaves mainly for social and political rather than productive purposes. Beyond a certain surplus, societies with relatively advanced state and market structures create elites who aim to exploit more labor than available in their households, thus leading them to slavery or serfdom to meet the latent demand for manpower. Population density is not always positively correlated with slavery. As Patterson notes, elites in old states and new often demand slaves not due to a scarcity of labor, but to mitigate or otherwise manipulate the social capital of prestige or ostensible political equality (e.g., Han China). In this way, it is not the land to labor ratio that determines the scarcity of labor, but a range of cultural conditions on the exploitation of traditional sources of labor. In this sense, the most salient aspects of such an analysis is that both categories with high levels of surplus have a negative correlation between population densities and structurally significant forms of slavery. In fact, high surplus and low agrarian dependence exhibits a perfect negative correlation, with twice as high as those with high levels of agrarian dependence. Surplus is the critical factor, then, not the land-labor ratio. The scarcity of labor is not an economic force that creates slave-holding norms; the correlation of slavery and population

⁴ Patterson, "Structural Origins of Slavery," 14-15; M. Bloch, "The Rise of Dependent Cultivation and Seigniorial Institutions," in J. Clapham and E. Power, eds., *Cambridge Economic History of Europe, vol. 1, Agrarian Life of the Middle Ages* (Cambridge, 1942), 194-211.

density is extremely variable: for some it is negative and for others it is positive, with the overall correlation positive. The directional relation is determined by the critical variable – surplus – correlates to a continuum of dependency on agriculture.⁵

In what follows, I provide a prospectus of the remaining parts of this project. In the first section (Part II), "Subsistence and Sovereignty," I elaborate the consequences of a prehistorical philosophical anthropology for ancient Greek and classical Roman concepts of freedom and slavery. In the second section (Part III), "Agriculture and Biopower," my narrative turns to northwestern Europe amid the late medieval transition from feudalism to capitalism. In the third section (Part IV), "Seed and Machine," my narrative turns to the New World. Between biopower and capitalism, I seek to relate the history of political economy to the history of biological systematics on the one hand, and ideologies of race and science on the other.

Subsistence and Sovereignty

In Part II, "Subsistence and Sovereignty," I elaborate the consequences of a prehistorical philosophical anthropology for ancient Greek and Roman intersections of freedom and food, slavery and agriculture.

In Chapter 5, "Farming and Democracy," I analyze myths of autochthony and autarky in Homer and Hesiod for their relationship to the rise of the ancient Greek *polis* in the late eighth century. Like the Near Eastern riverine states, the coalescence of the early Greek state is linked to the rise of an agrarian form of power with intensive irrigation and high concentrations of people and grain. Small, only loosely organized in geographic and strategic terms, these early Greek communities practiced a collectivized agriculture under centralized control. On vast, flat

⁵ Patterson, "Structural Origins of Slavery," pp. 18-25; P. Brunt, *Italian Manpower, 225 BC-AD 14* (Oxford, 1971), pp. 9, 28; C. Wilbur, *Slavery in China During the Former Han Dynasty, 206 BC-AD 25* (Chicago, 1943); I. Gelb, "Prisoners of War in Early Mesopotamia," *Journal of Near Eastern Studies* 32 (1973): 70-98.

plains under the control of local officials, rudimentary cereal agriculture was complemented by large herds of sheep grazed extensively around the transhumance. At this scale, state-level hierarchies were only slightly larger than surrounding agrarian settlements that were dependent on and dominated by a fortified palace. In this palatial economy, food was stored at a central citadel for protection and distribution. The organization of labor involved a dependent, vulnerable population, as well as an asymmetrical distribution of knowledge and tools.⁶

Around 1200 B.C. these palatine societies vanish abruptly, initiating the so-called Greek Dark Age. The Mycenaean collapse is often portrayed as a loss, an interruption in the progressive development of Greek civilization, for by 1100 B.C. the architecture, writing, and palatial economy disappear completely. With the peninsula depopulated, Greeks disperse into smaller groups or household units. Little variety appears amid extant settlements, and most structures are domestic in character. Many of the earliest houses are simple one-room structures – often with a hearth or center – and most reveal traces of cooking, spinning, weaving, food storage and domestic crafts. In these dispersed, autonomous assemblages particular families or clans dominated. Local elders and strongmen ruled each kin-based clan, and continued to draw wealth and power from pastoralism rather than agriculture. Without landed property, wealth and status turned primarily on livestock and surplus.⁷

The sudden destruction of the Mycenaean palaces dramatically reorganized society into independent kin-based clans that dominated a largely impoverished agrarian population. For

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⁶ J.-P. Vernant, *The Origins of Greek Thought* (Ithaca, 1982), 19-22, 25-27, 29-30; V. Hanson, *The Other Greeks*, 29-31; M. Finley, *Economy and Society in Ancient Greece*, (London, 1981), 200-212; P. Halstead, "Agriculture in the Bronze Age: Towards a Model of Palatial Economy," in *Agriculture in Ancient Greece*, B. Wells, ed. (Stockholm, 1992), 116; P. Halstead, "The Mycenaean Palatial Economy," *Proceedings of the Cambridge Philological Society* 38 (1992): 57-86.

⁷ Morris, "The Early *Polis* as City and State," in J. Rich and A. Wallace-Hadrill, eds., *City and Country in Ancient World* (London, 1991), 27, 31-34; Patterson, *Freedom, vol. 1*, 49; P. Garnsey, *Famine and Food Supply*, 107-119; J. Toutain, *The Economic Life of the Ancient World* (New York, 1968), 33; Demosthenes 20.31-2; Thucydides, 3.86; L. Gernet, *The Anthropology of Ancient Greece*, 314; P. Rhodes, *Commentary on Athenaion Politeia*, 137-146; C. Patterson, *Pericles' Citizenship Law 451-450 B.C.* (New York, 1981), 180-182.

nearly four centuries this culture thrived by small-scale cereal cultivation on the flat plains and grazing livestock in the nearby hills. Around 750 B.C., however, this extensive agro-pastoralism began a slow, difficult transition to intensive agriculture. Thucydides reports that Dark Age Greeks lived by semi-nomadic subsistence, and thus already presumes sedantism and agriculture are essential conditions for civilization:

There was no settled population. Instead migrations were common, the majority of tribes abandoning their homes under pressure from superior numbers. Since there was no trade or freedom of intercourse by either land or sea, since they cultivated no more land than what the bare necessities called for, and since they had no capital, they did not plant their land in permanent crops – for they could not know whether an enemy might invade and take the produce away. And since they believed that they could supply their needs at one place as well as another, they cared little whether they changed residence. Therefore they never established great cities nor achieved any other form of greatness.

Coincident with the end of the Dark Age is the Greek adoption of those improved species of olives, grapes, grains and other new crops associated with *polis* life. This triad of cereals, vines, and olives was an important development in the diversification of Greek subsistence, and seems to have provided a well-rounded diet of storable crops. As these grew established, the requisite knowledge of propagation and cultivation spread as well, which encouraged specialized agrarian development across the ancient Greek world.⁸

While these crops are central to the history of Greece, their importance lies in their adaptability to marginal soils on the one hand, and their specific political effects on the other. Farmers, especially planters of trees and vines, require certain kinds of rights before investing

⁸ Snodgrass Archaic Greece, 35-39; Finley, Economy and Society in Ancient Greece, 207-211; Thucydides, 1.2.2; S. Isager and J. E. Skydsgaard, Ancient Greek Agriculture (London, 1993), 114; Hanson, The Other Greeks, 33, 42, 40.

resources to enrich themselves and their community. After farmers achieve such rights, a social transformation occurs. Between new cultivars and rising populations on a depopulated landscape, the concept of land "privately" held, unattached to any one person but held inalienable by a single family, emerged. According to Victor Davis Hanson, the novelty of the *klêros* was that each "producer farmed privately and on his own account, [and] had private property in his product and marketed it." The crops that small, subsistence farmers cultivate and those planted for market export are very different. Renters, serfs, slaves, servants, and lessees have neither the resources nor the incentives to plant an orchard or vineyard; neither is it likely anyone would accept the risks entailed in arboriculture and viticulture without clear and semi-permanent rights to the use of land. The process of bringing marginal land into production through personal initiative – rather than political dictate – marks for Hanson "the real beginning in the West of individual property holding on any wide scale." Such farmers "have confidence that they can and will stay put, that they can and will keep the countryside populated, prosperous, and peaceful. They are not just a different sort of farmer, but a different sort of person as well."

At the beginning of the sixth century a widespread agrarian intensification was well underway. This transition incorporated olives, figs and grapes as a way to mitigate the declining marginal productivity of the land, which by this time was nearly exhausted by extensive cereal cultivation. As forests were felled to create new fields for grain, older fields were not replanted in grain or standard staple crops, but filled with orchards, vineyards and fruit groves.

Arboriculture and viticulture require heavy expenditures of capital, and do not provide profits for years and even decades; olives must be irrigated, and vineyards are notoriously labor-intensive.

⁹ S. Humphreys, *The Family, Women, and Death* (London, 1983), 22; M. Finley, *The Ancient Economy* (Berkeley, 1973), 18; Hanson, *The Other Greeks*, 28; J. Pecirka, "Land Tenure and the Development of the Athenian *Polis*," in Vard and Willet, eds., *Geras* (Prague, 1968), 192; S. Meikle, "Aristotle and the Political Economy of the *Polis*," *Journal of Hellenic Studies* 99 (1979): 52-73; P. Barlett, "Adaptive Strategies in Peasant Agricultural Production," *Annual Review of Anthropology* 9 (1980), 555.

Such long-term, high-profit, non-staple crops must be introduced over time – often several generations – before production is sufficient for livelihood. These forms of agriculture are highly sensitive to a variety of contingencies including weather and disease, and war and conflict.

Farmers involved in annual vegetable or cereal cultivation can recover from such calamities, sometimes even by the next season, farmers of olives or grapes production can be effectively ruined by such incursions, taking decades to recover if they ever do. 10

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In Chapter 6, "Citizen and Slave," I analyze the relationship between agriculture, slavery and *polis* democracy in classic fifth century Athens. While fifth-century Athens is the classical origin of *polis* democracy, the first institutions described specifically as democratic are found at Chios in the mid-sixth century. Chios is also noted by ancient sources to be the first *polis* to import slaves from abroad on any significant scale. This rapid coincidence of slavery and democracy in Chios was far from unique, for in Athens too the emergence of democratic politics is directly linked to large-scale slavery. In this way, the intensification of Greek slavery was a factor in the development of democracy.

In the early *polis*-period the distinction between slave and free is ambiguous at best. In Homer, for example, free laborers and slaves are interchangeably referred to as *drester*, or "one who works or serves." In some instances – especially if both were Greek – the term for masters and slaves was the same to contrast metics or foreign slaves. That the situation changed significantly after Homer and Hesiod, a change represented by the emergence of a predominant term for chattel slave, *duolos*; in all likelihood this did not originate with slavery, but in the condition of "not-belongingness" with which Greeks were so keenly aware. The other term for

¹⁰ A. Snodgrass, *Dark Age of Greece* (Edinburgh, 1971), 387; Patterson, *Freedom*, 48-50; A. Sarpaki, "The Palaeoethnobotanical Approach," in *Agriculture in Ancient Greece*, B. Wells (Stockholm 1992), 70; Isager and Skydsgaard, *Ancient Greek Agriculture*, 85.

slaves was *andrapodon*, which de St. Croix argues was used "loosely and even purely metaphorically." Ellen Wood notes this lexical issue is compounded by the fact that few languages have as many terms for those who work or serve as classical Greek. Thus any claim that the Greeks consistently distinguish between types of slavery is misguided and, in fact, misses the key point that the rhetoric of the classical Athenian writers reflects an aristocratic ethic in which distinctions among kinds of servile and menial classes are of little moment.¹¹

The categories of free and servile do not strictly coincide with either the type of labor or juridical status. Homer and Hesiod do not discriminate between slaves and free persons according to whether they engage in manual labor. The slave is rather identified through an account of their origins, and a description of the act of enslavement. From the artifactual and literary evidence available, most slaves in early Greece appear primarily in domestic contexts, performing services associated with the household rather than agriculture. While the relatively few numbers of slaves whose occupations are recorded as specifically agricultural may indicate that slaves were used more frequently in domestic and proto-industrial settings, Thomas Wiedemann argues that agrarian slaves were of the lowest social state, far less likely to win their freedom, and so generally less worthy of note. Contrary to the view of Wood and others limiting slavery to urban craft production and larger farms and estates, moreover, Hesiod provides clear evidence that even small, hardscrabble farmers possessed at least a few slaves. Thus in all likelihood there was a strong demand for slaves even in Homeric society, and at least for the wealthy the ownership and employment of agricultural slaves is assumed.¹²

¹¹ Homer, Odyssey, 15.384-8, 17.248; Finley, *World of Odysseus*, 49; Rihill, "Hektemoroi," 104; F. Harvey, "Herodotus and the man-footed creature," in L. Archer, ed., *Slavery and Other Forms of Unfree Labor* (London, 1988), 42-52; G. de Ste Croix, *The Class Struggle in the Ancient Greek World*, 138, 278-283.

¹² Patterson, Freedom, 70; Wood, Peasant, Citizen, and Slave, 4, 48; W. Booth, Households (Ithaca, 1993), 23; Hesiod, Works and Days, 406; Homer, Odyssey, 11,489, 18,356-64, 14.14-28, 17.212-14; Snodgrass, Dark Age Greece, 35-39; Wiedemann, Greek and Roman Slavery, 133; Rihill, "Hektemoroi," 95.

If early Greek slavery remained small-scale, unstructured and unregulated, by 500 B.C. it penetrated all sectors of Greek society, sanctioned and regulated by *polis* law. And if early slaves were primarily linked to the home rather than the field, by mid-millennium slaves commonly work in the *polis* and surrounding countryside. This rapid structural articulation of slavery transformed ancient Greece from a society with slaves to a full-scale slave society.

Contemporary estimates of the total number of slaves in Attica vary widely, from sixteen percent of the total population in the late fourth century to 69 percent in 323 B.C.; a significant number worked in the Laureion silver mines, while others worked as domestic servants, urban craftsmen, day laborers, civil servants, prostitutes, policemen, entertainers and agricultural laborers. Indeed, most wealthy Athenians in the fifth-century kept slaves, while even moderately wealthy residents like Plato and Aristotle kept a few slaves in their personal employ.¹³

Despite near silence in the archival and archeological record, it is nevertheless clear that something dramatic occurred between Hesiod and Solon. Rather than freedom, Hesiodic agrarian democracy aimed for a social and juridical equality within the social hierarchy; in fact, if Hesiod is an accurate source for the social ills of the early *polis*-period, it is fairly clear that large-scale intensive slavery did not yet exist in Greece, yet by Solon laws required buying back Athenians already sold into slavery. Traditional explanations often begin with the complaints of Hesiod and extrapolate their growing acuity over time. In any case, that a small farmer such as Hesiod was writing poetry at all indicates a remarkable change in the relationship of Greeks to language. According to J. P. Vernant, the late eighth and early seventh centuries saw the rise of discourse as an instrument of power, with the art of politics increasingly requiring the art of rhetoric.

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¹³ As many as 30,000 slaves may have worked simultaneously at these mines and mills during their height in the late fourth century; the classic study on this is S. Lauffer, *Die Bergwerkssklaven von Laureion* (1879); P. Anderson, *Passages from Antiquity to Feudalism*, 37; Wiedemann, *Greek and Roman Slavery*, 80; E. Wood and N. Wood, *Class Ideology and Ancient Political Theory*, 11-21.

According to Vernant, as the benefits of citizenship include an increasingly wide but ultimately limited group, a "double impulse to democratization and disclosure" emerged in which certain forms of knowledge, value and technique were deployed as strategic elements of a common culture. Removed from the secret scribal archives, language and truth are submitted to public debate and criticism.¹⁴

In the first half of the sixth century, a confluence of factors precipitate a dramatic uptick of slavery, including a latent demand for more flexible labor, the sudden loss of the traditional source of labor, declining soils and a crisis of marginal productivity, and a powerful expansion of both military and commercial sectors. At first gradually and then all at once, this allowed the Greeks to attain hegemony over newly discovered barbarian peoples, which became the primary source of slaves. Once this began, each factor worked to reinforce the other in a positive feedback loop of war and slavery at the heart of Greek wealth and power. As slavery intensified, so too did the loathing of free farmers for labor for others; as land was removed from cereal culture to supply emerging export markets, Athenian demands for imported grain only increased, thus stimulating foreign trade with incentives. So despite being emancipated from debt slavery, the majority of Athenians were increasingly reduced to the level of subsistence farmers while large, peri-urban commercial farms increasingly relied on slaves. Over time, then, elite Greek agriculture grew dependent on slavery in the commercial fruit, olive and wine markets to meet the needs of foreign exchange, an expanding domestic demand, and their own subsistence and artisanal requirements. After Solon, this dynamic intersection leads to importing large numbers of foreign slaves to meet already existing labor demands. 15

¹⁴ Vernant, *The Origins of Greek Thought*, 19-22.

¹⁵ Patterson, Freedom, 19-20, 70; Patterson, Slavery and Social Death, 58; Mossé, The Ancient World at Work (New York, 1969), 25-30; R. Mondolfo, "The Greek Attitude to Manual Labor," Past and Present 2 (1952), 5; C. Starr, Individual and Community: The Rise of the Polis 800-500 BC (New York, 1986), 77-80; M. Ostwald, Nomos and

Yet the dramatic uptake of slavery in the sixth century originated not only in the labor supply crisis, but in a preexisting demand for it as well. New tastes, increasingly influenced by newly opened Asian and African trade routes, as well as the inevitable cross-cultural experiences enabled by war and conquest, emerged among the aristocratic classes. Luxuries became needs, new forms of surplus extraction were needed to support such transformations of desire. In the seventh century, Finley notes, there emerge "consciously aristocratic patterns of consumption" that correspond to "new modes of artistic and poetic thought." These new consumption patterns were predicated on the increasing number of slaves, both from the new-found successes on the battlefield, as well as the opportunities to exchange flesh afforded by the development of external trade, particularly to the east. Finley argues these new needs, combined with the crisis of labor supply, led to the adoption of large-scale slavery.¹⁶

If personal freedom evolved from the feminine experience of primitive slavery, civic freedom was born of the masculine experience of citizenship. Rather than feminized empathy, that is, for Athenian men in the sixth and fifth centuries the prevailing response to slavery was masculine envy; instead of responding to the position of slaves, men responded with envy to the status and fortune of masters. In this way, rather than the plight of the slave, what impressed the average Greek man was the power and honor it gave to masters. For both rich and poor this was a zero-sum approach to life. The perception of gain often induced outrage by those unable to benefit from slavery, for what was lost – or at least threatened – was the integrity of the Attic homeland. First with slaves, and later with metics, the social cohesion of democracy in Athens

the Beginnings of Athenian Democracy (Oxford, 1969), p 55, 154; see also p 137-160; see also K. Raaflaub, et. al, eds., Origins of Democracy in Ancient Greece (Los Angeles, 2007).

¹⁶ Finley, The Ancient Greeks, 36; Patterson, Freedom, 77; Rihill, "Hektemoroi," 89 R. Osborne, Demos: The Discovery of Classical Attika (Cambridge, 1985), 142; Hesiod, Works and Days, 61-62, 67; duBois, Sowing the Body, 43, 45-64, 66, 69, 57, 42-47; for more see R. Osborne "Social and Economic Implications of the Leasing of Land and Property in Classical and Hellenistic Athens," Chiron 18 (1988): 279-323 and "Is It a Farm?' The Definition of Agricultural Sites and Settlements in Ancient Greece," in B. Wells, ed., Agriculture in Ancient Greece (Stockholm, 1992).

was eroded as large-scale slavery undermined the central values of *polis* life. In practice the alterity of slaves only reinforced the value of native citizenship, and in the ensuing struggles between the landed aristocracy and the rapidly expanding georgic class of farmer-soldiers, political discourse increasingly relies on natality and alterity as the basis of social inclusion. In these struggles elite concessions to the nascent middling agrarian class created the Greek concept of civic freedom; its practical effects, in other words, took the form of an expanded concept of citizenship to include those who were neither slaves nor aliens. Most Greek men never lost sight of this valuable distinction, which leads Patterson to identify "a close causal link between the value of citizenship and the exclusion of the non-native." In this way, citizenship was generated from the contradistinction of non-native, the most extreme cases of which were slaves. And while this remained a wholly masculine affair, exclusion of the alien slave is soon conflated with the exclusion of the domestic woman.¹⁷

Pierre Vidal-Naquet argues the ancient Greek *polis* is "marked by a double exclusion," namely, women and slaves, from which the citizen is created. Like Max Pohlenz and Kurt Raaflaub, Patterson traces the origins of personal freedom to the private realm of the household, for only with Solon did the majority of Greek men attend to freedom as a central social value. Addressing Athenians as fellow citizens, it is Solon who transfers the norms of freedom into the social and political realm. Clear philological evidence links the appreciation of free citizen status to the intensification of slavery and the rise of a resident alien population in the sixth century. Thus only with the *polis* concept of citizenship does a sharp dichotomy of free and unfree emerge, causing a steep rise of anxiety amid traditional aristocratic elites. Yet with the permanent expansion of the Athenian elite over the course of the sixth century, many a tyrant

¹⁷ H. Kitto, *The Greeks* (London, 1962), 243-252; Patterson, *Freedom*, 77-79; J. Almeida, *Justice As An Aspect of the Polis Idea in Solon's Political Poems* (Leiden, 2003), 211-212; V. Rosivach, "Redistribution of Land in Solon, Fragment 34 West," *Journal of Hellenic Studies* 112 (1992): 153-157.

found support in the rising hoplite class, which exacerbated existing social tensions with the aristocracy.¹⁸

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In Chapter 7, "Property and Subjection," I follow the concept of citizenship to classical Rome and examine its relationship to the rise of slavery in the Roman republic. Slavery existed in Rome from the earliest recorded period. In the first century B.C. Greek historian Dionysius of Halicarnassus reports that slavery began with Romulus giving Roman fathers the right to sell their children into slavery, while the oldest law and constitutional core of the republic – the Twelve Tables in 450 B.C. – indicates slavery was an ancient practice across Italia. From the third century B.C. to the fourth century A.D., Rome was a slave society, and by the first century B.C. a majority of Romans were of servile ancestry. According to Patterson, this was the first time in human history such a large proportion of a major world civilization directly descended from slaves. In this way, Patterson says, behind all the rhetoric of cultural grandeur "lay a sordid tale of prodigious robbery by one of the most rapacious ruling classes that has ever existed." ¹⁹

Roman slavery was linked to debt bondage, or *nexum*, which by the early republic was fully imbricated into Roman law. A form of contract, the *nexum* involved a free man pledging himself or his son to bondage as collateral for a loan. Often abusive and always humiliating as the practice was, a *nexus* nevertheless remained a Roman citizen, yet on default he was summarily enslaved. As with Athens, then, pervasive anxiety about the *nexum* turned on the fact that it could – and did – end in perpetual slavery. At the height of social unrest in the Gallic wars,

¹⁸ P. Vidal-Naquet, *The Black Hunter* (Baltimore, 1986), 206; Pohlenz, *Freedom in Greek Life and Thought*, C. Rofmark, trans. (Dordrecht, 1966), 4-5; K. Raaflaub, *Die Entdeckung der Freiheit* (Munich, 1985); for more, see A. Andrewes, *The Greek Tyrants* (London, 1956).

¹⁹ Finley, *Ancient Slavery and Modern Ideology*, 84; Patterson, *Freedom*, 214-216, 211, 208; Garnsey and Rathbone, "The Background to the Grain Law of Gaius Gracchus," *Journal of Roman Studies* 75 (1985): 21; G. Rickman, *The Corn Supply of Ancient Rome* (Oxford, 1980), 138; for slave wars, see M.I. Finley, *Ancient Sicily*, rev. ed. (London, 1970), p 137-147; for legionary activities, see Brunt *Italian Manpower*, 433.

plebs leveraged their position as the basis of Roman military power to cancel *nexum* debts and removed the threat of heritable slavery. Only with the *Lex Poetelia Papiria* of 326 B.C. was the *nexum* abolished. Personal liberty – in the literal sense of lack of slavery – was thus inextricably linked to economic insecurity, a fact which Roman elites exploited to their own ends by way of republican ideology.²⁰

Like Greece, Rome was fundamentally transformed by large-scale slavery. Most urban craftsmen, for example, were slaves or freed slaves. While the structural location of slaves in urban craft sectors was a huge boon to the Roman middle and upper classes, domestic service, finance, banking and education were all permeated by slaves as well. Not only did Romans have a more acute distaste for manual labor, manufacturing and commerce than Greeks, but Rome had a longer tradition of manumission in the *clienta* system. The prohibition of nobles in banking or trade enabled slaves to earn considerable sums on the basis of lordly norms of honor and virtue. Yet by the end of the republic these norms quickly shift, as landlords use trusted former slaves as personal agents. There is a notable tendency for urban slave systems to exhibit significantly higher rates of manumission than rural counterparts. Especially in Rome, the chance for urban slaves to attain freedom was generally high, while the vast majority of rural slaves could never expect release from thralldom. Indeed, Wiedemann notes that sending a slave from the urban to the rural estate was a punishment; slaves of the rural familia were the lowest in status. Together with the urbanity of citizenship, this provides key insight into the rapid association of cities and freedom in the ancient and classical world.²¹

²⁰ W. Burkert, *Greek Religion*, J. Raffan, trans. (Cambridge, 1985), 108-9; B. Kunstler, "The Werewolf Figure and Its Adoption Into the Greek Political Vocabulary." *Classical World* 84 (1991): 189-205; E. Francis, "The Personality Type of the Peasant According to Hesiod's *Works and Days*: A Culture Case Study," *Rural Sociology* 10 (1945): 277.

²¹ Patterson, Freedom, 214, 235, 218; Wiedemann Greek and Roman Slavery, 122; Patterson, Slavery and Social Death, 30; Lindsay, J. Blast Power and Ballistics: Concepts of Force and Energy in the Ancient World (New York, 1974), 344, 412-13, 417.

Regardless of its relative degree of oligarchy and democracy, because the Greek polis involved a civic identity rooted in the agrarian property of its immediate locality, it was territorially inelastic and politically impotent for erecting conditions of unitary Greek rule. Oligarchic in form and aristocratic in ideology, the Roman constitution was based on an economic stratification of Hellenic society in which citizenship was extended to allied ruling classes on the peninsula. Amid the chaos of the republican wars, the ruling class in Rome could thus concede to political demands precisely because its constitution extended of the Roman concept of citizenship to other Italian cities. This institutional flexibility gave Rome a key advantage over the course of empire, marking a significant development in comparative political efficacy. For Perry Anderson, the decisive innovation in this regard was above all economic, namely, the development of large-scale *latifundia* slavery. While Greeks employed slaves widely in agriculture, this practice remained confined to small areas; farms in Attica and Messenia remained quite modest in size, perhaps thirty to sixty acres at most, generally limited by the lack of concentrated wealth central to the *polis* idea. By contrast, Romans accumulated vast sums of wealth and land without the use of agrarian slaves. By the late republic, however, Romans were joining their huge estates with agricultural slavery for the first time in Western history, radically transforming the countryside in the process.²²

The economic impact of Roman conquest was critical to large-scale agricultural slavery. While evidence indicates different categories of smallholders, Patterson argues the confluence of personal freedom and agrarian autarky facilitated the dissemination of a radical element. Despite the existence of semi-servile agriculture in regions like Etruria, as land-hungry colonists settled

²² P. Brunt, "Italian Aims at the Time of the Social War," *The Journal of Roman Studies* (1965): 90-109; P. Anderson, *From Antiquity to Feudalism*, 59-60; G. Fussell, *Classical Tradition in Western Farming*, 20-24; for more, see W. Heitland, *Agricola: A Study of Agriculture and Rustic Life in the Graeco-Roman World* (Cambridge, 1921).

across Italy they diffused agrarian ideals of the independent free farmer largely by demonstration. From the mid-second century, and accelerating with the civil wars, Roman slavery is inextricably linked to the rise of the plantation system organized on the villa. As an economic unit, the *villa* closely resembled the modern plantation in its focus on production for export, including wine, olives, poultry, cattle and wool. With the exception of Laurium and other mines, on these late republican estates Roman slaves suffer the most brutal treatment in antiquity. Chained to their barracks at night, herded in gangs and beaten to extract maximum labor, slaves needed only to survive for more than eight years to more than return their costs. Slaves pour into Rome from the third century on as booty from seemingly perpetual war. At the same time, war dramatically reduced the free Roman smallholder population that once formed the robust basis of Roman power; in fact, from 225 to 43 B.C., while the slave population expanded five-fold, the free population begins a precipitous decline. Endless war entailed endless mobilization, removing citizen-soldiers from farms for increasingly lengthy periods; between 200 and 167 B.C. more than a tenth of Roman men were permanently under arms, which was possible only because a burgeoning slave workforce released the manpower required for the armies and navies of the republic.²³

Victory in war brought more slaves into the economy, from which process a mutually reinforcing pattern of development gave rise the slave *latifundia*. By the first century prominent Romans owned estates as big as 200,000 acres, making *latifundia* an agrarian phenomenon that immediately transformed the rural economy. From the start *latifundia* were composed of smaller *villae* farmed as single units, and only rarely did they take the form of single, massive tracts of land; this remained true throughout the empire, even as consolidation into large units, or *massae*,

²³ D. Rathbone, "The Slave Mode of Production," *Journal of Roman Studies* 73 (1983): 160-68; P. Brunt, *Italian Manpower*, 225 B.C. to A.D. 14 (Oxford, 1971), 426.

became common. The distinction of *villae* and *latifundia* is thus one of degree, not kind, while other forms of agricultural organization like the extra-territorial *saltus* estates remained negligible. The typical pattern for owners of *latifundia* was to own many mid-sized farms across a region to maximize management with agents and bailiffs. With even these moderately sized properties much larger than the largest Greek farms, the Roman *latifundia* was a significant extensive development of the most intensive forms of ancient agriculture.²⁴

Within a relatively short time *latifundia* are the dominant agrarian units in southern Italy, Sicily, Egypt, north Africa, and southern Spain. While *latifundia* could take the form of largescale mixed farms, huge ranches in the south to breed and fatten livestock gave impetus to the extension of Roman pastoralism across the Mediterranean. The economic novelty of this arrangement was not the use of slaves, but the increased scale of production and changing patterns of land tenure that made more effective use of transhumant pastoralism. Often in conjunction with *multi-cropped* cereals, vineyards and orchards, by the second century B.C. pastoralism was central to the Roman agrarian economy. This centrality was partly due to the leasing of estates won by conquest, partly because leather and other secondary animals products were in high demand by the military and urban consumers. Using slaves as herdsmen or shepherds common, as it was held to be a particularly odious form of work. Exposed to elements and enemies, slave shepherds spent long periods of time away from home and family; not only did they have to be strong physically, but they had to be well armed. Transhumance itself caused problems, moreover, as moving large herds of sheep, goats and cattle from summer to winter pastures was a process almost impossible to manage from afar. In this sense, it is hardly

²⁴ Patterson, *Freedom*, 217; Jones, *The Later Roman Empire*, II: 712-715; Anderson, *From Antiquity to Feudalism*, 62; see also K. Kautsky, "The Technical Inferiority of the Slave Economy," in *The Slave Economy: Society in the Roman Empire* (London, 1953).

surprising that slave shepherds were a major source of instability in Sicily and Italy, and would continue to cause trouble well beyond the end of the republic. ²⁵

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In Chapter 8, "Sovereignty and Social Death," I conclude Part II by examining imperial Rome and the politics of privation. As the Roman republic declined, Latin agriculture was viable only with a steady supply of slaves provided by a seemingly endless state of war. As the Principate replaced the republic, the rapidly declining slave population of Rome precipitated an agricultural crisis. Under Augustus and Tiberius the empire ceased expanding, which further reduced the slave supply. By the reign of Augustus complaints surfaced about *possessores* kidnaping and forcing men to work in the fields; under Tiberius this practice spreads to tourists, runaway soldiers and other young men. In response Augustus establishes a directory of all rural prisons in Italy, while Tiberius appoints *curatores*, or inspectors, to mitigate such illegal enslavements. Indeed, even while slavery shaped the basic agrarian organization of society, there were several clear drawbacks to the exclusive reliance on slaves, the first of which was the loss of capital when slaves died. In this regard Varro advises the really difficult, unhealthy work be reserved for free day laborers to avoid spending slave capital and so relieve landowners of the risk of loss. Another factor was basic to all agriculture, namely, the labor requirements of peak seasonality. To maintain the slaves needed to sow, cultivate and harvest, that is, entailed feeding idle hands for as much as half the year without a return on investment. For this reason Cato advises using redemptores, or contract labor, to harvest grapes and olives, while politores, or day laborers,

²⁵ K. White, "Latifundia," 76-77; Patterson, Freedom, 207, 212; for classic sources, see Wiedemann, Greek and Roman Slavery §141, 228, 229, 233; J. Frayn, Subsistence Farming in Roman Italy (London, 1979), 73-87; for an excellent analysis, see D. Kehoe, Economics of Agriculture on Roman Imperial Estates in North Africa (Gottingen, 1988); for traditional views, see C. Yeo, "The Economics of Roman and American Slavery," Finanzarchiv 13 (1952): 445-85; A. Toynbee, Hannibal's Legacy, 2 vols. (London, 1965), II: 298-299; on transport, see C. Yeo, "Land and Sea Transportation in Imperial Italy," TAPA 77 (1946): 221-244.

were used to improve land, clear pasture and were paid with a share of the harvest. In this way, a steady supply of free workers was generally assumed to be a net positive for large landowners, yet constant dependence on such labor was often too costly to be a regular practice; the more cash-strapped masters were, the greater the likelihood they relentlessly exploited their *instrumentum vocale*, which in turn only increased the economic isolation of large estates from the rest of society. In any case, in time the availability of free labor declined, as they were needed on during peak seasonality, thus eliminated their need in a agriculture still overwhelmingly committed to slave labor.²⁶

By the end of the republic, Roman agriculture was so saturated by slaves it transformed the entire Roman economy. Slaves and their descendants constituted near ninety-percent of urban artisans and merchants in the city of Rome alone. According to Patterson, the Roman doctrine of *dominium* offers a "fascinating paradox" for the theory and practice of Roman slavery. In the concept of *dominium*, the Romans developed one of the most important fictions in the history of law, from which in the West only English common law has escaped relatively unscathed.²⁷

In comparison to Greek slavery, Roman slavery had a major impact on both urban and rural sectors. Given the sheer number of humans classes as slaves within Roman jurisdictions, moreover, their status was of crucial social and political importance. With a highly local,

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²⁶ Weber, *Roman Agrarian History*, 149; Varro, I.16-17; Cato, 5, 136, 142, 145-150; Columella 1.8; A. Dalby, *Cato: On Farming* (New York, 1998); K. White, "The efficiency of Roman Farming under the Empire," *Agricultural History* 30.1 (1956), 87; C. Stevens, "Agriculture and Rural Life in the Later Roman Empire," *Cambridge Economic History* (Cambridge, 1941), 1:89-93; on grain imports, the classic modern statement is T. Mommsen, *Römische Geschichte*, 3 vols. (Leipzig, 1854-6,), esp. § 8, ch. 12; for recent scholarly emendations, see M. Spurr, *Arable Cultivation in Roman Italy, c. 200 BC – c. AD 100* (London, 1986); Brunt, *Italian Manpower*, ch. 20; G. Rickman, *Corn Supply of Ancient Rome* (Oxford, 1980), 101-119; N. Purcell, "Wine and Wealth in Ancient Italy," *Journal of Roman Studies* (1985); for population and urbanization, see Brunt, *Italian Manpower*, 294.

²⁷ Patterson, *Slavery and Social Death*, 30; P. Garnsey, *Food and Famine in the Graeco-Roman World*, 1; K. White, *Roman Farming* (London, 1970), 350-362, 368-376; C. Hawkes, "The Roman Villa and the Heavy Plow," *Antiquity* IX (1935): 339-341; R. Collingwood and J. Myres, *Roman Britain and the English Settlements*, 2nd ed. (Oxford, 1937), 208-221; C. Stevens, "Agriculture and Rural Life in the Later Roman Empire," in *The Cambridge Economic History of Europe, vol. 1, Agrarian Life of the Middle Ages.* J. Clapham and E. Power, eds. (Cambridge, 1942),103.

particularistic culture, citizenship and ethnicity were inextricably linked, thus mitigating the need to define the status of slaves. Greeks were reluctant to enslave Greeks, though it without doubt occurred occasionally. More importantly, Greek states jealously guarded the privilege of citizenship. Despite the large numbers of Greek slaves, then, there was never a social question of decided who was and was not a slave. By contrast, Rome from the beginning was a pluralistic, inclusive society with fewer long-standing normative social divisions of labor to insulate the freeborn. In this way, the Romans turned to legal institutions to clarify the political concepts necessary to ground these social relations. By the late republic, however, even *dominium* had succumb to pressures attendant the rapidly expanding slave economy, leading jurisprudence to return to an ancient principle of proprietary action – the *legis action sacramento in rem*.

Ironically, this led Roman jurists to understand the relativistic basis of even this justification for classing slaves as chattel: all human beings can be the object of property precisely because property is nothing but a specific set of social relations joining individuals in a thing called the *public*.²⁸

Importantly, Roman law did not contain – and in fact explicitly included – juridical forms of agency. According to Aaron Kirschenbaum, the upshot of this was the *familia* became important non-contractual agents, while the *peculium* functioned in an increasingly key role as an instrument of agency. Roman jurists distinguished between the urban *familia* and the rural *familia*, which was largely a status distinction but also corresponded to the division of labor among slaves who serve and those slave who produce. By late antiquity, most rural slaves were considered producers permanently bound the land they worked much like *coloni*, while urban slaves were the actual moveable property of masters. As slaves and freedpeople gradually

²⁸ M. Finley, "Was Greek Civilization Based on Slave Labor?," in M. Finley, ed., *Slavery in Classical Antiquity* (Cambridge, 1960), 53-72; Finley, *Ancient Slavery and Modern Ideology*, 81; Garnsey, *Ideas of Ancient Slavery*, 128; M. Griffin, *Seneca: A Philosopher in Politics* (Oxford, 1976), 459-460.

replace the native freeborn in the urban economy over time, by the first century A.D. the majority of Roman artisans were former slaves; by contrast, rural slaves could not be forced to leave because no other community was required to accept them. In this way, the practical crux of the issue turned on whether landlords could resume control of the land to which rural servile workers were attached – thus at least making them day laborers, if not wage workers – and if so, whether they could alienate that land altogether. In either case, when it was a matter of inheritance landlords had the absolute right to intervene and determine who would ultimately assume control of the land. Constantine, for example, decreed state land partitioned and hereditary leases divided among the male descendants of slaves to remain together; for all private landowners who aimed to sell their land, upon sale they did not retain control of the *coloni* to resettle them elsewhere. Such a prohibition would not have been necessary under Roman civil and administrative law, for *coloni* on large estates were bound to the land as their *origo*, or legal residence. By the late empire, however, the fusion of these two legal distinctions increasingly construed former slaves and dependent workers as the property of landlords.²⁹

Relatively simple from a contemporary perspective, the Roman economy was more advanced than any in the pre-modern world; social and economic power was mediated through wealth, especially land and slaves. In this sense, the transition from ancient Greek democracy to classical Roman republicanism is a shift in the social relations of property. According to Marshall Sahlins, it is a transition from a system in which "a right to things [is] realized through a hold on persons" to one in which "a hold on persons [is] realized through a right to things."

And so while there are important precursors and exceptions, this transitions finds its earliest

²⁹ T. Wiedemann, *Greek and Roman Slavery*, 122; Patterson, *Freedom*, 215; Weber, *Roman Agrarian History*, 167; B.H.S. van Bath, *Agrarian History of Western Europe*, O. Ordish, trans. (Cambridge, 1963), 54-63, esp. 59; Lindberg, D. *The Beginnings of Western Science* (Chicago, 2007), 137; S. Applebaum, "Agriculture in Roman Britain," *Agricultural History Review* VI (1958): 66-86.

expression in the Roman legal order. In jurisprudence, new social relations of property give rise to a decisive legal concept, namely, the absolute ownership of things. In contrast to Greek property laws, which made no distinction between ownership and possession, Roman property laws emphasize the absolute *dominion* over *things* as the juridico-philosophical precondition for an economy of simple commodity production. According to J.W. Jones

[t]his conception of ownership was the mirror of a society in which wealth mainly consisted of tangible things, things which formed a functional unit... Legal and economic property coincided: the notion of ownership applied to, and was the corollary of, a functional microcosm, an *universitas rerum*.... Property, then, is the central institution of private law, and fulfilled in the system of simple commodity production the functions of providing an order of goods, and, in part, an order of power. It did so without any essential aid from other institutions.

In this way, it is *private* rather than *public* law this concept had the most transformative effect, for by conceptualizing, reflecting and supporting both production and power with no auxiliary cultural support, it created a new class of human beings. According to W.W. Buckland, Roman slave laws are "the most characteristic intellectual product of Rome,"

[and] there is scarcely a problem which can present itself, in any branch of law, the solution of which may not be affected by the fact that one of the parties of the transaction is a slave, and outside the region of procedure, there are few branches of the law in which the slave does not prominently appear.

This is perfectly understandable in light of the fact that, along with land, slaves were most important source of Roman wealth. "Of the two," Patterson says, "land was without doubt the more important; but slaves were the more flexible and problematic." For Patterson, the legal

fiction of *dominium* highlights the legal acumen of the Romans in four ways. First, by stressing the difference of corporeal and incorporeal, or the distinction of *persona* and *res* – persona and thing – the Romans left no ambiguity in the juridical paradigm relevant for deciding what was and was not a proprietary object: only a material object could be a tangible thing. More importantly, however, the fiction emerged property was no longer a relation between people but a relation between persons and things, all of which perfectly coincided with the most rapidly expanding source of wealth, namely, slaves.³⁰

The three constituent elements of this new legal paradigm – *persona, res*, and *dominium* – directly correlated to the three elements of the master-slave relation, namely, master, slave and enslavement. Yet dominium was more than just a relation between a persona and a thing, which is to say it was absolute power. This involved more than the capacity to derive the full economic value of thing – the *usus* and its *fructus* – but the power to abuse it – *abusus* – to use it up, so to speak; in short, *dominium* included a right of inner total power over a *thing* beyond any mere control. According to Patterson, then, in this sense the juridical concept of *thing* and *thing-ness*, as well as the very idea humans could have *relationships* to *things*, is simply unintelligible if not for the simple fact the *thing* in question was, in fact, a human figured as socially dead – that is, a slave. So while there is debate over the origin of primitive Roman property law, there is consensus the concept of *dominium* was not fully developed prior to the end of the republic. Only in the first century B.C. does the classic sense of *dominium* emerge, while the other term for property – *proprietas* – emerged even later. In fact, *dominium* first appears in the third century B.C. before the word had even come to mean "owner"; instead, it was the term for "slave

³⁰ Patterson, *Slavery and Social Death*, 28-29; D. MacDowell, *The Law in Classical Athens* (Ithaca, 1978), 133; J. Jones, *The Law and Legal Theory of the Greeks* (Oxford, 1956), 203, 214; O. Kahn-Freund, "Introduction to Renner," in K. Renner, *The Institutions of Private Law and Their Social Functions* (London, 1949), 24-25. W. Buckland, *The Roman Law of Slavery* (Cambridge, 1908), iv.

master." From the third to the first centuries, moreover, as the institutions of Roman slavery rapidly proliferated, the shift in meaning from slaves to all objects of property correlates almost perfectly with the transition of the Roman economy from one in which slaves were one of many objects of property to a society in which slaves were one of the two most important sources of wealth. While for Patterson the emergence of large-scale slavery was clearly not the only factor at work in this shift, it is a reasonable proposition to figure it as the decisive one.³¹

In this way, then, through *dominium* slavery was transformed into a condition of powers in *rem*; hence, by the end of the republic the most common conception of slaves among Romans was as a *thing*. The slave was above all a *res*, the only human *res*; the key attribute of enslavement was the slave was subject to lordly *dominium*. As such, attempts to define slavery merely as a legal condition or juridical status – let alone a concept of civil law wherein humans are defined through ownership – is fundamentally misguided. According to Patterson, not only do such definitions confuse legal fiction and socio-legal realism, they depict the history of human intellectual development backward: it is not the slave and slavery that must be defined with absolute concepts of property, but the notion of absolute property that must be explained in terms of classical Roman slavery. It is thus also a fundamental error to figure slavery as demeaning labor *per se*; instead, it was labor *for others* that was anathema – not labor "in itself," whatever that may mean. Nor is it correct that slavery *caused* a contempt for labor; rather, slavery *exposed* the servile nature of labor *for others*. In many ways, then, theories of slavery are always already embedded in an ideological matrix wherein analytic scrutiny occasions a crisis

³¹ C. Westrup, *Introduction to Early Roman Law*, 2 vols. (Oxford, 1944), 2:159-161; H. Jolowicz, *Historical Introduction to the Study of Roman Law* (Cambridge, 1952),142-144, 272-276; G. Diósdi, *Ownership in Ancient and Preclassical Roman Law* (Budapest, 1970), 94-122; Patterson, *Slavery and Social Death*, 31.

for the ruling class, a trend perhaps most visible in the mass migration of free farmers from the *latifundia* in the final years of the Roman republic.³²

Agriculture and Biopower

In Part III, "Agriculture and Biopower," my narrative resumes in Europe amid the late medieval transition from feudalism to early modern capitalism. My aim in this Part is to supplement the Foucaultian genealogy of modern power with an analysis of early modern European agriculture and the coalescence of the English and French states. While Foucault mentions the importance of "English empiricism" several times, nowhere does he afford early modern England the same extended attention he pays to France. To this end, I situate John Locke as a key theorist of early agrarian capitalism to examine the relationship between agriculture, capitalism and modern biopower. In the first section I analyze forms of economic coercion at the intersection of the English agriculture and enclosure. In the next section I situate early modern natural law theory amid the rise of European Atlantic slavery. In the next section I turn to France in the late Middle Ages to examine the relationship between traditional French agriculture and the coalescence of the absolutist state. Finally, I end with an analysis of the conditions of French agrarian culture immediately before the physiocrats for its intersections New World slavery. The general aim of this Part is to situate agriculture in the emergence of biopower as an art of government whose mechanisms of security continue to shape everyday political life.³³

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In Chapter 9, "Enclosure and Coercion," I begin with late medieval England and trace the rise of a unified English state in the fifteenth and sixteenth century. Before the Norman conquest,

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³² M. Finley, "Between Slavery and Freedom," *Comparative Studies in Society and History* 6 (1964): 233-249; Patterson, *Slavery and Social Death*, 32, 34.

³³ Anderson B. and H. Borns, *The Ice Age World* (New York, 1994); K. Briffa and T. Osborn, "Blowing Hot and Cold," Science 22 March (2002): 2227-2228.

vestiges of Roman slavery persisted longer in Britannia than on the Continent, where powerful men cultivated huge estates with slaves and other bonded workers. While scattered "free" tenancies did exist, as the Anglo-Saxon world is unsettled this social strata becomes increasingly exposed to natural and social disasters, compelling many to seek protection from armed lords and regional chiefs. When William the Conqueror invades in 1066, however, the political economy of the British Isles is at once transformed into what is now known as a basic feudal system, with a highly centralized kingdom uniting the monarchy and aristocracy into a political and military force. Even as the kingdom technically remained royal property, then, the political economy of feudalism distributed much of the realm to nobles who held legal title to land through obligations of what was known as the "knights fee".³⁴

The center of Norman power was the lordly manor. With brutal vigor, Normans built elaborate manors by subjugating the Anglo-Saxons now under their dominion. Yet compared with their French counterparts, English manors soon shed any connotation of juridical or economic power, instead coming to mean a good, substantial home such as many Norman invaders occupied prior to crossing the Channel. Like on the Continent, however, the complex of dependent farms and peoples clusters around the lordly fields were increasingly linked to the term for the place from which orders were issued and to which harvests were delivered in the annual settling of accounts: the home of the lord and manor. Indeed, as Marc Bloch notes, on both sides of the Channel the house of the local magnate was necessarily the center of every genuine feudal estate: the manor in England, known across much of the Continent as the seigneurie, while in England the manor rises as the premier institution of social power. In this

³⁴ T. Lowry, "The Agricultural Foundation of the English Oeconomy," 77; R. Allen, *Enclosure and the Yeoman* (Oxford, 1992); see also, C. Cipolla, *Before the Industrial Revolution: European Society and Economy, 1000-1700.* 2nd ed. (London, 1980).

way, from the start English feudalism was entirely martial, supported by a manorial system obligating nonmilitary services by commoners to both lords and king.³⁵

The course of English manorialism was interrupted in 1348 as the bubonic plague reached the British Isles, claiming as much as thirty percent of the population. Although little evidence exists, many scholars agree one consequence was a dramatic change in the relationship of landlords and tenants. With a smaller population more land fell fallow; with more vacant land, lords soon faced an acute labor crisis as tenants fled manorial estates to cultivate newly freed land. Because the plague reduced the land to labor ratio, that is, the peasantry had new opportunities to provide for their own subsistence and so avoid working for others. In the wake of the Black Death landlords respond by increasing exactions on peasants and appropriating vacant land; Parliament, too, addressed the labor shortage problem by passing the Statute of Laborers in 1351, not only fixing wages for workers but restricting their overall freedom of movement as well. Because the majority of peasants lived at subsistence levels, lords could increase manorial revenue in one of two general ways. On the one hand, they could sell "freehold" titles to land, which was established by statute in 1290 for freemen only; on the other hand, they could place parts of the manor formerly dedicated to tenants into "sheep walks," and so enter the more lucrative fiber trade. To prevent tenants from leaving manors, lords also began to grant rights of "copyhold" that were recorded by the steward of the manor; in many cases feudal dues were replaced altogether by money rents and token contributions. And so even while such "tenancies-at-will" were terminable by landlords annually, during this time the "customs of

³⁵ M. Bloch, "The Rise of Dependent Cultivation and Seigniorial Institutions," 259; G. Duby, *The Three Orders: Feudal Society Imagined*, A. Goldhammer, trans. (Chicago: 1980), 42-43, 105, 158-160, 274; E. Callahan, "Blood, Sweat and Wealth," *History of Political Thought* 17:1 (1996): 21-35; C. Nederman, "Property and Protest," *Review of Politics* 58 (1996): 323-344; Wood, *Foundations of Political Economy*, 98-108; for a comprehensive account, see D. Wood, *Medieval Economic Thought* (Cambridge, 2002).

the manor" come to hold special normative weight in English society; among the most important were to common lands and customary use rights to otherwise private property. 36

By 1380 the tensions of English feudalism collapsed under popular resistance. Ignited by the Poll Tax of the same year, subsequent revolts and social unrest are organized by a widespread refusal to pay a tax that placed disproportionate burdens on the poor. Beyond direct taxation, the central grievance of the peasantry concerned the equality of social status and the abolition of servile tenures. Rodney Hilton traces this popular ideology in the work of figures like John Ball and Wat Tyler, both of whom articulate ideas common among the lower classes of the late fourteenth century, namely, the natural equality of men and oppression was an artifact of social life. Late medieval England was thus marked by constant struggles between lords and peasants over feudal rents and other forms of extra-economic surplus extraction based on the social relations of serfdom. Because rents, fines, tallages, and labor services were based on the level of manorial dependency, to seek to avoid feudal exploitation was to seek a change in tenure. Given that free status was determined by the level of exploitation to which one was subject, peasants often sought to assert their freedom individually. Most strategies were nonviolent, yet resistance did erupt into violence on several notable occasions; perhaps most significant was the uprising of 1381. While the rebellion consisted of both rural peasant and urban plebian factions, its long-term import was clearly for the peasantry.³⁷

With the abolition of servile tenures and labor shortages after the plague, the mobility of the peasantry became a salient concern for landlords. In the face of peasant resistance and rising

³⁶ G. Kennedy, *Diggers, Levellers, and Agrarian Capitalism* (Lanham, 2008), 135; A. Macfarlane, *The Origins of English Individualism* (Cambridge, 1978), 83; A. Beier, *Masterless Men: The Vagrancy Problem in England, 1560-1640* (London, 1985); Fideler, "Poverty, Policy and Providence," in *Political Thought and the Tudor Commonwealth*, Fideler and T. Mayer, eds. (New York, 1992).

³⁷ R. Hilton, "Peasant Movements in England Before 1381," in *Class Conflict and The Crisis of Feudalism* (London, 1990),193; for more, see A. Briggs, *A Social History of England* (London, 1983).

social leverage, feudal lords found it difficult to manage the crisis of seigneurial incomes and negotiate the balance of power with the peasantry. By the turn of the century the Statute of Laborers was nearly impossible to enforce, and lords with vacant land were soon willing to accept tenants with little regard to status. And so while there is little doubt these dynamics hastened the end of servile tenures, the consequences of the popular uprisings in the late fourteenth century were far more complicated than the simple abolition of serfdom and liberation of the peasantry; unable to re-enserf peasants, for example, English lords retained the power to level arbitrary fines on any customary tenure that was bought, sold or inherited, as well as to appropriate vacant holdings as freeholds and lease to new tenants. Even as servile tenures were abolished in England, then, the persistence of customary tenures meant a large section of the peasantry remained unfree in practice, subject to the powers of the manorial lord.³⁸

In this way, the structure of the Norman kingdom was already distinct from feudal Europe, for at its core was a body of nobles with the powers to tax and legislate. As the first European nobility to demilitarize, by ceding control of land to nobles the English state gained a new ally; in fact, after the Norman invasion no other state in Europe was as unified. While this "trade-off" of state power and aristocratic land led to unusually high concentrations of English property, it was royal recognition of manorial power that compensated lords for the loss of extraeconomic power, which in time created new norms for the use of landed property. Feudal English monarchs pursued an array of projects to facilitate state-formation, perhaps the most important of which was the creation of a unified legal system for all English subjects adjudicated by a system of royal courts. Ostensibly dating from "time out of mind" – thus discovered rather than made – English common law was a pastiche of Anglo-Saxon traditions and Norman

³⁸ Kennedy, *Diggers, Levellers, and Agrarian Capitalism*, 106, 100, 103, 114-115.; E. Fryde, *Peasants and Landlords in Later Medieval England, c. 1380 – c. 1525* (New York, 1996), 117.

conventions based on a complex set of precedents established by the rulings of judges. While it certainly had a less rational, more chaotic façade than Continental Roman law, English common law was codified and much more a truly national legal system.³⁹

By the late fifteenth century England is unique among European medieval agrarian states. Rapid population growth, high grain prices and rising interest rates induced landlords to extract higher rents from yeoman and middling farmers. To increase rents, landlords sought the best tenants and helped improvements and other issues of joint concern. This forced yeomen to increase productivity, lower costs, specialize and invest in new leases and improvements. Increased competition turned on thrift, industry and care, the response to which changed rural England. Farms were reorganized around improved methods such as convertible husbandry, floating water meadows, the use of manure, new crops and fallow grasses and stock breeding. With this new agrarian mentality estates were enlarged by engrossment and enclosure, while traditional farms in the south and east were transformed by large-scale, efficiently organized agrarian enterprises that produced for the market using wage-labor, and reinvesting profits to expand production. From 1500 to 1700, for example, agricultural yields in the Midlands more than doubled, largely a result of improved seed selection techniques and the widespread adoption of improved methods by the yeomanry. 40

While at this time tenancies varied, they were increasingly subject to rents fixed not by custom, but market conditions. In this way, there was in effect a market in leases; tenants soon competed not only for a consumer market, but in a market for land as well. Those living on the land – including yeomen – were thus increasingly dependent on the market for access to land,

³⁹ Wood, *The Origins of Capitalism*, 99, 137; C. Davies, "Slavery and Protector Somerset," *Economic History Review* 2nd ser., 193 (1966): 533-549; C. Davies, *Peace, Print and Protestantism, 1450-1558* (London, 1977), 261, 266-288; T. More, *Utopia*, J. Turner, trans. (London, 1961), 79-80; A. Pagden, *Lords of All the World*, 76. ⁴⁰ Allen, *Invention of the White Race*, 231; Wood, *Origins of Capitalism,* 18

and only those capable of producing under competitive market conditions by increasing productivity continued to have access to this primary means of production. Success bred success, then, and competitive farmers had ever more access to land while less productive farmers were removed from the land altogether. Undoubtedly dramatic, while Ellen Meiksins Wood notes the tendency to overemphasize enclosure at the expense of other factors, they are nonetheless a "vivid expression of the relentless process that was changing not only the English countryside but also the world: the birth of capitalism." The dispossessions of early enclosures had the effect of making rural poverty less visible. Over time, poor commoners were replaced by two distinct classes: on the one hand, more prosperous tenant farmers shared with wage-laborers landlessness, moving about the countryside in a network of easements across private land that provided access to their fields and workplaces; on the other hand, the last vestiges of a military aristocracy were quickly becoming the ornaments and affects of the territorial aristocracy, country gentleman living on the rents from tenants.⁴¹

As agrarian capitalism was established, landlords and merchants resorted to a range of tactics to pressure tenants, including rack-rents, lease-mongering, forestalling and regranting, as well as using dubious standards of weight and measure. In providing the basis from which to develop manufacturing and commerce, capitalist agriculture was a necessary condition of possibility for the industrial revolution. With the rising demand for woolen textiles, agrarian capitalism was inextricably linked to its pastoral base; from the twelfth century, England led European raw wool exports, and from the fifteenth century began a transition into textile production for domestic as well as international markets. In the south and east of England, pastoral capitalists grazed huge numbers of sheep to met the demand for raw wool already being processed in the rural cottager economy. Soon rural capitalist entrepreneurs began to manage

⁴¹ Wood, Foundations of Political Economy, 43; Wood, Origins of Capitalism, 109, 127.

collecting, weaving and distributing finished cloth for domestic consumption, thus making rural England the birthplace of both agrarian and industrial capitalism. Dominated by the grain and mixed-livestock downlands of south and east England, capitalist forms of agriculture prevailed long before the eighteenth century, and by the end of the century capitalist agriculture is well-established across the entire island. Yet capitalist agriculture was only one sector in an otherwise overwhelmingly agrarian economy. Most farmers – yeomen or tenants – ran family farms around domestic subsistence. While actual output did not increase during this time, an increase in the total output per unit of work allowed fewer English farmers to feed a rapidly expanding non-agrarian population. With grain and cereal yields increasing by the late seventeenth century, England was now in the enviable position of being able to feed and clothe its people while

By the early sixteenth century, social tensions in England were not only more frequent, but more intense as well. Between 1450 and 1642, for example, London was occupied a dozen times; a king was killed, violence wanton and unrest prolonged and ubiquitous. Whereas early conflicts were predominantly religious, over time they acquire a decidedly economic character. Driving these transformations was English agriculture. Changes in social property relations – along with a marked increase in productivity – not only created a consumer market for inexpensive everyday goods such as food, clothing and furnishing, but a labor force for their production as well. These dynamics were both symptom and cause of forces changing the composition and rhythms of the English countryside. While London was the center of national

⁴² Wood and Wood, *A Trumpet of Sedition* (New York, 1997), 5, 13-18; For more on this literature, see G. Fussell, *The Old English Farming Books: From Fitzherbert to Tull, 1523-1730* (London, 1947); J. Thirsk, "Plough and Pen: Agricultural Writers in the Seventeenth Century," in *Social Relations and Ideas*, T.H. Ashton, et al., eds. (Cambridge, 1993); "Agricultural Policy: Public Debate and Legislation," in J. Thirsk, ed., *Agrarian Change, 1640-1750*, vol. 5 (Cambridge, 1985); A. McRae, *God Speed the Plough: The Representation of Agrarian England, 1500-1660*. (Cambridge, 1996).

life, beyond its urban environs lay the fields and furrows sustaining the English way of life. This was yeoman's England in the process of dramatic change.⁴³

From the outbreak of rebellion in 1549 to the revolutionary fervor of 1649 marks a period of dramatic change. In response to the upheavals of 1640 Parliament established the basic principles of constitutional monarchy: no taxation without consent, regular Parliaments and the end of royal prerogative courts for law enforcement. The elaboration of a systematic conception of individual rights occurred amidst this prolonged struggle of Crown and Parliament from 1628 to 1640. The Petition of Right of 1628 is the first articulation of the common law precept every free man possessed certain rights and liberties that afford specific protections and claims against the state. With the 1641 Grand Remonstrance these were codified as "the lives, liberties and estates" of free Englishmen; the "birthrights of freeborn Englishmen" thus became natural rights and a newly juridical "multitude" enjoyed unprecedented political rights. 44

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In Chapter 10, "Land and Labor," I trace the intersection of early agrarian capitalism and the rise of English slavery in the Atlantic world. With the rise of the Tudors in the late fifteenth century, Henry VIII and Elizabeth work with Parliament to build a single legal system and transfer power from the royal household to a Privy Council as the basic means of governance. From north England to Wales, regional councils were directed by the Privy Council and – in the first salvo of English imperialism – Ireland is temporarily subdued. In this way, for over a century and a half

⁴³ I date the *English Revolution* from the outbreak of violence between royalist and parliamentary forces in 1642, through the years of the Cromwellian Protectorate and the Restoration in 1660; by contrast, the *Civil War* refers to the period of open warfare itself; Campbell, *The English Yeoman*, 5-6; Kerridge, K. *The Agricultural Revolution* (New York, 1968), esp. chs. 3-6.

⁴⁴ Wood and Wood, *Trumpet of Sedition*, 138, 64; N. Wood, "Thomas Hobbes and the Crisis of the English

Wood and Wood, Trumpet of Sedition, 138, 64; N. Wood, "Thomas Hobbes and the Crisis of the English Aristocracy," History of Political Thought 1 (1980), 452; N. Wood, John Locke and the Origins of Agrarian Capitalism (Berkeley, 1995); on Locke and Bacon, see. C. Glacken, Traces on the Rhodesian Shore (Berkeley, 1967); W. Coleman, "Providence, Capitalism and Environmental Degradation," Journal of the History of Ideas 37 (1976): 27-44; J. Turner, The Politics of Landscape (Cambridge, 1979); S. Schama, Landscape and Memory (New York, 1995); R. Grove, Green Imperialism (Cambridge, 1995).

English monarchs cooperate with the landed nobility to secure a monopoly on violence unlike any other European state.⁴⁵

Yet attempts of the Tudor gentry to establish plantations in Ireland failed in short order. In both Ireland and the Americas, race and religion were used as exclusionary principles but within quite different structures of oppression: while nationality and religion prevailed in Europe, race and slavery ruled in the Americas. As different as they were, the Protestant ascendancy and black slavery were yoked to the rise of capitalism forms of accumulation. Unlike Thomas More who figured slavery as a behavioral device wielded by the state rather than a private resource commanded by the subject, early modern natural law theorists articulate a new ideology of slavery backed by Protestant theology as the basis the Atlantic plantation complex.

The decline of slavery in western Europe reflected political as well as economic developments. Medieval towns had long boasted that serfs and slaves could not breath the "free air" of their town. After 1226 simply living a year and a day in a town like Toulouse, for example, conferred freedom on its denizens. With the decline of slavery, and in a context of intense international rivalry, appeals to such sentiments reinforced the notion of civil liberty figuring national soils ought not be sullied by slavery. Signs of this popular anti-slavery sentiment appear in thinkers such as Jean Bodin when, despite his disagreements with so many, he agrees lawyers "hold servitude to be directly contrary to nature." Yet popular anti-slavery did not necessarily entail rejecting any ethnic conceit or xenophobia, as kings and commoners alike looked on slavers as suspect. 46

⁴⁵ For more, see Hilton, *Decline of Serfdom in Medieval Europe* (New York 1969); G. Bois, *The Crisis of Feudalism* (Cambridge, 1984); R. Hilton, *Class Conflict and the Crisis of Feudalism* (London, 1990).

⁴⁶ T. Allen, *The Invention of the White Race*, vol. 1: *Racial Oppression and Social Control* (London, 1994), 52-90; Hilton, *The Decline of Serfdom in Medieval England*, 28; A. Momigliano, *On Pagans, Jews, and Christians* (Middletown, 1987), 11-57; A. Ferguson, *Utter Antiquity* (Durham, 1993), 2; J. Thompson, *Models of Value* (Durham, 1996), 40-86; Appleby, *Economic Thought and Ideology*, 222-241; S. Buck-Morss, "Envisioning Capital: Political Economy on Display," *Critical Inquiry* 21 (1995): 434-467; 832-834

Philosophically, the Renaissance did little to weaken slavery in the universal, non-ethnic sense; the rediscovery of the ancients, in fact, only reinforced such ideas. Concepts supporting slavery combined with the notion of particular traits – figured as defects in the origin of civilization – justified slavery, and the idea that elaborated chattel slavery was itself a sign of civilization. Not only do virtually all natural rights theorists end with some justification of slavery, Thomas Aguinas argued that "possessions and slavery were not the product of nature, but made by human reason for the advantage of life." (That said, the medieval thinker most skeptical of slavery – Duns Scotus – was also a Franciscan.) Jean Gerson developed the critique of Aquinas to allow free people to willingly exchange their natural liberty indefinitely, and detailed circumstances in which they might be presumed to do so. Over the course of the sixteenth century, this Gersonian approach was radicalized with direct implications for the Atlantic slave trade. As Richard Tuck notes, justifications of slavery had a general logic of recognizing African judicial and commercial processes rather than rely on any stigmatization of ethnicity or descent groups. Indeed, the influence of Gerson is clear in the works of Luis de Molina, Hugo Grotius, John Selden and Thomas Hobbes, each of which openly endorses slavery.47

In the 1520s, from Portugal and the Netherlands a new generation of theorists begins to revise medieval ideas in the service of constructing a modern rights theory. In Portugal, Luis de Molina argues all rights are active rights, and any seemingly passive rights are actually rights to do things. Yet a right to beg is not the same as the right to give alms, and the same held true for slavery:

⁴⁷ Davis, *Problem of Slavery in Western Culture*, 130; S. Drescher, *Capitalism and Anti-Slavery* (London, 1987), 14-16, 172; Tuck, *Natural Rights Theories*, 19, 49, 3; for example, see J. Duns Scotus, "Peccatum Servituti," in *Duns Scotus on the Will and Morality*, trans. and ed., A. Wolter (Washington, D.C., 1986).

Man is a *dominus* not only of his external goods, but also of his own honour and fame; he is also *dominus* of his own liberty, and in the context of natural law can alienate it and enslave himself. It follows...that if a man who is not subject to the law sells himself unconditionally in some place where the relevant laws allow him, then that sale is valid.

For Molina, the "Aethiopians" were in this position and there was no reason to suppose they were not voluntary slaves, having exchanged their freedom for anything from their lives to a string of beads. As Tuck notes, Molina's account was a dramatic incursion into settled political theory; it was a consistent and comprehensive alternative to everything Vitoria and his followers held, paying little to the niceties of humanism. Coming from a country deeply engaged in the slave trade and colonial rivalry, the revival of Gersonian rights theory by Molina looks very much like an attempt to provide an ideology of mercantile capitalism, but its clear connections to free will suggests a wider scope. As a free and independent being, man made his own decisions and is responsible on matters of both physical and spiritual welfare.⁴⁸

From the Renaissance to the Reformation, of course, theology justified slavery. Luther and Calvin both emphasized the necessity of secular subordination and property. In fact, Protestants had more difficulty with slavery at least in terms of the religious community; since they inclined to believe in the equality of believers, the slave convert – or even more, the slave born into a Christian household – was often thought to be entitled to manumission. At the last gathering of Reformed Churches at the Synod of Dordt in 1618, slavery was a central topic, yet it took no formal position on the matter, instead leaving it to individual congregations to decide. In

⁴⁸ Tuck, *Natural Rights Theories*, 50-54; Goldstone, J. *Revolution and Rebellion in the Early Modern World* (Berkeley, 1991), 63-67; H. Markley, "Newton, Corruption, and the Tradition of Universal History," in *Newton and Religion*, J.E. Force and R. Popkin, eds. (Dordrecht, 1998), p 123-146; R. Lewontin and R. Levins, *The Dialectical Biologist* (Cambridge, 1985), p 133-142, 272-285; C. Crumley, "The Ecology of Conquest: Contrasting Agropastoral and Agricultural Societies' Adaptation to Climatic Change," in Crumley, ed., *Historical Ecology*, p 183-201, esp. 185. For depictions of modernity that elide ecological concerns, see T. Reiss, *The Discourse of Modernism* (Ithaca: 1982); for a critique, see B. Latour, *We Have Never Been Modern*, C. Porter, trans. (Cambridge, 1993); A. Crosby, *Ecological Imperialism: The Biological Expansion of Europe*, 900-1900 (New York, 1986).

any case, that heathens and pagans might benefit from Christian slavery appealed to both Protestants and Catholic alike.

While Genesis clearly declares the common descent of humanity from Adam and Eve, the universalist implications of this narrative were undermined by blaming non-European peoples for rejecting the principles of their forefathers. In the Noachid narrative the primordial "good man" condemns one of his grandsons to slavery, which taken with other passages (e.g., Paul in Corinthians) seems to sanction not only slavery, but slavery for particular descent groups. Noah has three sons: Shem, Japheth and Ham: "These are the families of the sons of Noah, after their generations, in their nations: and by these were the nations divided in the earth after the flood." The narrative tracks events closely:

And the sons of Noah that went forth from the ark, were Shem, Ham and Japheth: and Ham is the father of Canaan. These are the three sons of Noah: and of them was the whole earth overspread. And Noah began to be an husbandman, and he planted a vineyard. And he drank of the wine, and was drunken; and was uncovered in his tent. And Ham, the father of Canaan, saw the nakedness of his father, and told his two brethren without. And Shem and Japheth took a garment, and laid it upon both their shoulders, and went backward, and they saw not their father's nakedness. And Noah awoke from his wine, and knew what his younger son had done unto him. and he said, Cursed be Canaan; and a servant of servants shall he be unto his brethren. And he said blessed be the Lord God of Shem; and Canaan shall be his servant. God shall enlarge Japheth, and he shall dwell in the tents of Shem; and Canaan shall be his servant.

Ham committed an offence against the honor of his father, and despite the King James euphemistic elision *servant*, it is widely agreed *slave* is a better translation.⁴⁹

Many early modern Christians held this to justify slavery and perhaps even provided a basis for hereditary inferiority in tracing the sons of Ham to the land of "Cush," or Ethiopia, and regions now known as north Africa, Egypt, Libya and parts of Arabia and Palestine; not only does *cush* means "black" in Hebrew, *Ham* is close to the term for "hot." Moreover, on expulsion from Israel many Canaanites settled in north Africa and Carthage. So despite the biblical ambiguity of whether all of Ham's sons share in the paternal curse of slavery, the metonymy of Canaan suggests so. In this way, all blacks are figured to descend from Ham, whose original offense is echoed later by the prophet Isaiah. Egyptians and Ethiopians, he cries, will be taken captive by the Assyrians, hauled away into slavery, "young and old, naked and barefoot, even with the buttocks uncovered, to the shame of Egypt." Later rabbinical commentaries link the dark skin of Ham to illicit sex on the ark; the Jerusalem Talmud, for example, notes on leaving the ark his skin was "charcoal colored," while Genesis refers to Ham's seed growing dark. Finally, in the early Christian era Hebrews in Israel held slaves who by this time were likely "Canaanite" only in a metaphorical sense. In this way, from roughly the fourth to the eleventh century the curse of Noah was widely applied to all Hamitic progeny, which a number of Judaic, Christian and Muslim authorities approve, many of whom were based in parts of north Africa or the Middle East where African slaves were found. 50

⁴⁹ Genesis 10:32; Genesis 9: 18-27; XX, Ceremonies of Possession, 34-35; W. Allbright, From the Stone Age to Christianity (New York, 1957), 280-281; K. Whitelam, The Invention of Ancient Israel (London, 1996), 79-101; D. Aaron, "Early Rabbinic Exegesis on Noah's Son Ham and the So-Called Hamitic Myth," Journal of the American Academy of Religion, vol. LXIII:4 (1996): 721-757; D. Goldenberg, "The Curse of Ham," forthcoming in C. West, XX; M. Goodman, State and Society in Roman Galilee (Totowa, 1983), 17-24, 37-39; P. McC Flesher, Oxen, Women, or Citizens? (Atlanta, 1988), 54-59.

⁵⁰ Goldstone, J. *Revolution and Rebellion in the Early Modern World* (Berkeley, 1991), 63-67; H. Markley, "Newton, Corruption, and the Tradition of Universal History," in *Newton and Religion*, J.E. Force and R. Popkin, eds. (Dordrecht, 1998), p 123-146; R. Lewontin and R. Levins, *The Dialectical Biologist* (Cambridge, 1985), p 133-

St. Augustine famously declared the "state of slavery is rightly regarded as a penalty upon the sinner, thus the word slave does not occur in the Scriptures until the just man Noe branded with it the sin of his son." Yet Augustine did not single out the sons of Ham as unique in this regard; rather, all men were miserable sinners and deserved slavery. The Qur'an does not repeat the Noachid curse, and in time faith was held to erase all distinctions of race, yet a number of Muslim commentator adopt the myth of the curse by citing and embellishing Judaic and Christian sources. From this a consistent stress on Ham, black skin and slavery would become more prevalent in the Muslim world than in medieval Christianity. As Robin Blackburn notes, this is almost certainly linked to the higher numbers of black slaves in North Africa and the Middle East; in fact, medieval Christians were more concerned to find allies against Islam than justify black slavery. That said, many Latin Christians equated the color black with the devil, sin and sexual license, and subscribed to the idea tropical heat degraded the human condition. The devil inspired heathenism because the latter was adopted in preference to the Noachian code. Influential medieval maps known as *mappamundi* designated parts of Africa as the land of Ham in a type of moral mapping of humanity. The Ebbsdorf *mappamundi* of 1240, for example, represents the monstrous races as inhabiting the hot south, with only a few in the cold north and east where the children of Japheth live with other unclean peoples.⁵¹

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^{142, 272-285;} C. Crumley, "The Ecology of Conquest: Contrasting Agropastoral and Agricultural Societies' Adaptation to Climatic Change," in Crumley, ed., *Historical Ecology*, p 183-201, esp. 185. For depictions of modernity that elide ecological concerns, see T. Reiss, *The Discourse of Modernism* (Ithaca: 1982); for a critique, see B. Latour, *We Have Never Been Modern*, C. Porter, trans. (Cambridge, 1993); A. Crosby, *Ecological Imperialism: The Biological Expansion of Europe*, 900-1900 (New York, 1986).

⁵¹ St. Augustine, *The City of God* (London, 1984), 874, 648-653; quoted in "Letter of Pope Leo XIII," in Brownlow, ed. *Slavery and Serfdom in Europe*, xxvii-xlvii, xxix; for more, see J. Vercoutter, *et al.*, *The Image of the Black in Western Art*, vol. 1, *From the Pharaohs to the Fall of the Roman Empire* (Cambridge, 1976); J. Devisse, *The Image of the Black in Western Art*, vol. 2, *From the Demonic Threat to the Incarnation of Sainthood* (Cambridge, 1979), pp. 56-80; for examples of Muslim adoption of the curse, see J. Willis, ed., *Slaves and Slavery in Muslim Africa* (London, 1985); J. Friedman, "Cultural Conflicts in Medieval World Maps," in S. Schwartz, ed., *Implicit Understandings*, 64-96; J. Friedman, *The Monstrous Races in Medieval Art and Thought*, 100-103, 45-47; B. Braude, "The Sons of Noah and the Construction of Racial Identity in the Medieval and Early Modern Periods," *William and Mary Quarterly* (1997): XX.

In Europe, the story of Noah was mobilized most often to justify slavery and lend religious sanction to aristocratic ideology legitimating Norman or Goth rule, which are later written in genealogies of Japheth or Shem, often by way of the Trojans. By the early fourteenth century *Cursor Mundi*, the estate of laborers are denounced as descendants of Ham, while similar attempts are made to justify serfdom by way of the Noachid curse. By contrast, in the Holy Roman Empire the figure of Ham would have a quite different meaning: Ham was the ancestor of great rulers, leading a late-fifteenth century Nuremburg scholar to trace even Emperor Maximilian to Hamitic descent. The uncouth and frightening habits portrayed of wild and monstrous people suggested representations of Saracens, devils and rebellious peasants; indeed, those who worked in the open air were crude, menacing and had a dark, weathered complexion. As such, the intimation of a threat justified restraint. Later stereotypes of black slaves simply reproduce the social and gender biases of early modern Europe, portraying them as out of control, wayward, childlike, irrational, resentful and a source of sexual danger.⁵²

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In Chapter 11, "Governance and Dependence," I turn to early modern France to examine the intersections of traditional French agriculture and the rise of the sovereign, absolutist state. Between town and crown, French absolutism emerges on the basis of traditional French agriculture. French agriculture rested on two foundations, namely, the primacy of cereal cultivation and the necessity of fallow. Around these facts French agrarian society formed, explaining not only the kinds of plants and animals on French soil, but the so-called "cattle situation" and generally poor quality of implements. Agrarian culture varied by province – and within provinces; while in Flanders, Alsace and the southern wine lands there were well-

⁵² For many of these claims and more, see Poliakov, *The Aryan Myth* (New York, 1996); Davis, *Problem of Slavery in Western Civilization*, 115; Friedman, *Monstrous Races*, 236, 34-35.

developed markets, for vast regions an *ancienne agriculture*, or *ancienne manière*, contrasted to a *nouveau système*. Despite early enclosures changing life in Normandy and Burgundy, agrarian rhythms were much the same. Common fields were divided into three soles – one planted in wheat, one in spring barley or oats, and one in fallow – with village assemblies setting the crops and their rotations. While industrial crops like madder, hemp and flax were grown alongside crops and grasses, they played little part in the system.⁵³

Organized around customary tenancies, the French arable was divided into large fields with small strips for peasant subsistence along the edges. Before 1750, then, French agrarian life was based on an open-field system not unlike that of England two centuries prior. The distinctive, elongated shape of the old French *terroir* combined with intricate parcellization and texture to preclude agrarian individualism; the only signs of individual cultivation were on the seigneurial *réserve* and chateau parks. After the sixteenth century small plots were enclosed in *réunions* more efficiently shaped than under earlier *censiers*. There was, in short, not yet a different of *grande culture* or *petit culture*: while large farms were not rare – especially on church lands – as a rule seigneurs did not exploit directly more than a third of the land, leasing the rest to farmers. This system was only exacerbated by the *vaine pâture*, or the right to graze livestock in a district or adjacent area. After harvest fields were opened to commonly grazed cattle and sheep (pigs, goats and geese were not in the right) that had been eating hay or fallow forage, which was often meager and insufficient. Not only did this make the custom a central supplement to livestock diets, but the entire system proscribed *at least* a third of the French

⁵³ H. Root, *Agrarian Origins of French Absolutism* (Cambridge, 19XX); N. Onuf, "Sovereignty: Outline of a Conceptual History," *Alternatives* 16 (1991): 425-466; Fuhrmann, *Germany in the High Middle Ages*, 72, 147-148; V. Kiernan, "Private Property in History," in J. Goody, J. Thirsk, and E. Thompson, eds. *Family and Inheritance* (1976), 374, 376, 378

arable lay in fallow on any given year.⁵⁴ Because grain exhausts the soil more than any other crop, animal manures were absolutely critical, which in turn made fallow fields necessary. Scattered fields encouraged neglect and dishonesty, and with theft common the difficulty of policing discouraged improvement. With manure necessary to sustain productivity, let alone raise yields, livestock were required; to increase livestock required more land, and any increase of fallow entailed a reduction of arable. Pasture increased only at the expense of arable, then, a problem known as the "infernal circle" by contemporaries.⁵⁵

This system had strengths and weaknesses. On the one hand, a common calendar maintained strong village *esprit de corps*. Working together daily and sharing duties had common advantages as well, attenuated only by the gaps of rich and poor in the same province. The difference was stark between a wealthy *laborer* who had many fields and stock, and a poor *manouvrier* who owned nearly nothing. The critical point is the latter could survive. Subsisting on their own labor, as well as that of family and community, peasants commonly had full propriety in a cottage, garden and a few cows; they were, above all, full members of the community. The moral goods of this system thus turned on a distinct solidarity, and benefited most of the community from seigneurs to *laboureurs* to small peasants. There was, in short, a real dignity and durability to this *ancien régime* rural world. On the other hand, it was also a static world, entirely too complex and structurally unsuited for improvement. Communal cultivation compelled entire villages to follow the slowest, least elaborate methods; to be acceptable to all the overall standard of cultivation had to be the lowest possible. Though cover

⁵⁴ XX, English Farming Past and Present, 154; M. Bloch, Original Character of French Agriculture, XX; Liger, La Nouvelle Maison Rustique (1721), II: 782.

⁵⁵ Root, *Agrarian Origins of French Absolutism*, 105-108; E. Lodge, "The Communal Movement, Especially in France," in Tanner (ed.), *The Cambridge Medieval History*, vol. 5 (1957): 629; Baldwin, *The Government of Philip Augustus*, 152-175, 61-64; H. Rörig, *The Medieval Town*, 58; Contamine, *War in the Middle Ages*, 79, 83; J. Collins, *The Fiscal Limits of Absolutism*, 27; J. Scott, *Domination and the Arts of Resistance*, 443-445.

crops like turnips and sainfoin were not unknown, the *vaine pâture* institutionally precluded their extension on any significant scale. Long fallows, moreover, encourage weeds and thistles that in turn proscribe better methods of cultivation. Traditional means of tillage, seed selection and sowing kept yields chronically low; technical improvement were virtually impossible due to the weight of custom. Only on a few large estates in some provinces were cattle more than manure machines, which explains their rather careless husbandry, not the least of which was the disorder following upon herding them together with sheep on common pastures. Not only was precious manure squandered with animal vagrancy, diseases of all kinds proliferated in the several severe cattle plagues.⁵⁶

Bread was central to the French diet, with the average peasant eating a pound or two per day well into the nineteenth century. Only with the shift to commercial milling networks was bread the key commodity of contention, inserting bakers into the social dynamics of subsistence. Apart from rural areas most bought bread rather than grain, and so were more dependent on the carrying trades than under the ancien régime. Only with extreme scarcity did French people visit grain markets, hoping to save money in buying grain to have milled and baked. With increased dependence on bakeries and bread, it was critical to create, maintain and regulate the commodity chain from farm to fork – or, in this case, from field to bakery. The problem of subsistence was thus not simply or even primarily one of shortages caused by inadequate harvests; rather, it was a confluence of conditions both biological and social that was forever disrupting attempts to maintain public order and collect taxes. In this sense, it is possible to identify critical elements of

⁵⁶ Duby, The Early Growth of the European Economy, 200; Stephenson, Medieval Institutions, 117; Duby, Rural Economy, 56, 213, 239; Strayer, The Reign of Philip the Fair, 106; Given, State and Society, 196; Spruyt, The Sovereign State and Its Competitors, 91; Fawtier, The Capetian Kings, 77; E. Wood, Liberty and Property,147-149; Le Roy Ladurie, Carnival in Romans (New York, 1980), p 353-358; J. Franklin, ed. Constitutionalism and Resistance in the Sixteenth Century: Three Treatises by Hotman, Beza, and Mornay. (New York: Pegasus, 1969), 110.

French state formation and centralization by examining the intersection of urban needs, administrative pressures and regional responses.⁵⁷

The crux of French food politics, Paris depended on its rich but inadequate nearby plains, importing the rest from Orléanais, Burgundy and Picardy. Competing with areas beyond the capital for resources. Paris was the center of an asymmetrical trade network developing around a progressively effective apparatus of the administrative state. As local solutions were implemented at the national level, the identification and stabilization of the grain supply was neither smooth nor continuous. The relationship between Paris and its northwestern rival, the upper Normandy city of Rouen, is particularly revealing. On the banks of the Seine between Paris and the English Channel, it was a mercantile center of the Old Regime, a central entrepôt for goods moving between Paris, the French Atlantic colonies and the trade networks of northern Europe. With some 80,000 people in the textile manufacturing and commercial sectors, Rouen was wholly dependent on its grain halls and bakers for daily bread. With its population growing to more than 700,000 during Empire, Paris and Rouen came into increasingly direct conflict over regional wheat fields, especially those of the Vexin Normand, as well as the grain imports arriving from Channel ports. Rural areas north of Rouen were barren and sandy, unable to support the rapidly growing city, while to the east lay the Pays de Bray, where from barley and rye peasant struggle to wend from the land all it could bear. The true wealth of the Bray, however, lay not in its poorly cereals, but in the beans, oats and clover supporting the expanding herds of dairy cattle. Wagons of milk, cheese and butter traveled from to Paris as the region increasingly looked to the city as a market for its goods. By contrast, the Pays de Caux northwest

⁵⁷ Miller, Mastering the Market, 7; Hallam, Capetian France, 57, 154, 290, 305; Heer, The Medieval World, 343; E. Ennen, The Medieval Town (1979), 203; Hilton, English and French Towns, 11, 25; A. Hilbert, "The Origins of the Medieval Town Patriciate," Past and Present 3 (1953), 17; Anderson, Lineages of the Absolutist State, 18; M. Fulbrook and T. Skocpol, "Destined Pathways: The Historical Sociology of Perry Anderson," in Vision and Method in Historical Sociology, 186.

of Rouen rarely produced sufficient wheat or oats, with its people dividing their time between the farms and looms of its thriving cottage industry. This area also witnessed improvements in agriculture, as many fields were replaced with alfalfa, clover and colza, raising crop yields to sell in Rouen and other regional cities. ⁵⁸

In short, early sixteenth-century France was home to more inhabitants than any country in Europe. Although in principle peasants enjoyed secure tenure, in practice they were often subject to multiple seigneurial dues in addition to state taxes. By the end of the century the crown completed a massive overhaul of the bureaucracy, redistributed the tax burden in what Robert Briggs describes as a "massive spoils system," a "semi-institutionalized system of extortion and embezzlement" from which a new dynastic class of venal officials arose. So while state taxes and seigneurial privileges were sufficient to foment social discord, state centralization disrupted traditional interests and created a complex array of new social relations. Anti-royal sentiment was hardly unambiguous, yet as the state expanded so too did its organized opposition. Confessional issues only sharpened social lines, with decades of dynastic conflict intersecting theological disputes and economic crises. In France religious dissent fused disparate interests and discourses into a more or less unified resistance. Although concepts of resistance and popular sovereignty did cross religious lines, the Huguenots were among the first in Europe to articulate a theory of resistance against royal power. At least in France, Protestantism was effective politically insofar as it was adopted by certain segments of the nobility – particularly provincial aristocrats – for whom Catholicism was a creed of monarchy and absolutism. In this sense, several of the most significant concepts in the Western canon emerge from the French Wars of

⁵⁸ J. Fesler, "French Field Administration: The Beginnings," *Comparative Studies in Society and History* 5 (1962), 77; S. Painter, *The Rise of Feudal Monarchies* (1951), 10; J. Strayer, *On the Medieval Origins of the Modern State*, 57; for a different view, see C. Tilly, *The Formation of National States in Europe*, 26-27.

Religion as Protestant doctrine is used by provincial nobles and urban officials to assert local jurisdiction against the royal state.⁵⁹

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In Chapter 12, "Biopower and Bare Life," I conclude Part III with an analysis of... From the early eighteenth to the mid-nineteenth century France endured war, famine and political turmoil, during which time the maintenance of the grain trade and the problem of subsistence was of vital importance to the state. While acquiring sufficient food was a daily preoccupation for most people in early modern Europe, the anxiety of early modern French urbanites was particularly acute. At the first rumor of harvest failure large crowds would gather in towns and cities, attacking farmers taking grain to market, looting bakeries and mills, causing serious problems for public authorities. Rumors could stop the flow of grain even in the countryside, with rural consumers diverting grain from urban markets. While in most years French agriculture could sustain the French people, periodic shortages regularly disrupted French life every twenty years or so. Memories of empty stomachs, starving children, greedy merchants and ignorant officials left indelible marks on the social consciousness of every rank in French society. So when Montesquieu argues the state "owes all its citizens regular means of subsistence," he merely articulates an obvious truism for the vast majority of French subjects. The provision and distribution of food was too important to abandon to individual self-interest or market mechanisms.

Despite considerable variation, the problem of subsistence was not only central to lives of millions of peasants and artisans, it was also a primary concern of state officials, royal agents and public intellectuals. During a period where England remained relatively free of major subsistence

⁵⁹ R. Briggs, *Early Modern France*, *1560-1715* (Oxford, 1977), 3; G. Grantham, "Agricultural Supply During the Industrial Revolution," *Journal of Economic History* 49 (March 1989): 43-72; see also Hoffman, *Growth in a Traditional Society: The French Countryside*, *1450*-1815 (Princeton, 1996).

crises, late eighteenth century France suffered several disastrous famines. To understand this difference, Andrew Appleby analyzes the price of grain in this period for each country. During periods of acute scarcity in England, for example, oat and barley prices did not inevitably increase with the failure of the wheat crop, while in France all grain prices rose precipitously as news of wheat and rye harvest failures spread. As grain prices rose and the French poor were unable to acquire their most basic source of food, rates of starvation and malnutrition-related diseases spread. In this sense, scarcity had longer-term demographic consequences through reproductive rates and household composition. Although such crises subside in the early eighteenth century, the Revolution and Napoleonic Wars precipitate another round of dearths and yet another round of crises. Not until 1817 is France free from subsistence crises. ⁶⁰ By contrast, England is free of major subsistence crises after 1649; in the 1690s, for example, while France is starving to death England manages to avoid scarcity entirely. Some sixty years before France, then, England is able to feed its entire population, or at least to ensure famine does not decimate its population. ⁶¹

It is perhaps difficult to appreciate the permanent sense of anxiety food shortages caused in all segments of French society. Subsistence crises eroded public confidence in the state and could not be ignored. And so despite their uneven development, the steady increases in agricultural productivity in both northern France and the Paris basin failed to prevent regional

⁶⁰ J. Post, *The Last Great Subsistence Crisis in the Western World* (Baltimore, 1977), 53-67, 114-115, 117; A. Appleby, "Grain Prices and Subsistence Crises in England and France, 1590-1740," *Journal of Economic History* 39:4 (1979): 866-887.

⁶¹ W. Hoskins, "Harvest Fluctuations and English Economic History, 1480-1619," *Agricultural History Review* 12 (1964), 31-35; A. Appleby, *Famine in Tudor and Stuart England* (Stanford, 1978), 95-121, 135-137, 145-156; C. Rogers, *The Lancashire Population Crisis of 1623* (Manchester, 1975); J. Thirsk and J. Cooper, eds., *Seventeenth Century Economic Documents* (Oxford, 1972), 51-52; V. Skipp, *Crisis and Development* (Cambridge, 1978), 13-38; Appleby, "Grain Prices and Subsistence Crises," 867; T. Rabb, *The Struggle for Stability in Early Modern England* (New York, 1975), 3-34.

shortages putting undue burdens on another.⁶² Even if public officials and merchants successfully anticipated shortages, the logistics of transporting grain in early modern Europe could often prove socially destabilizing before the market could mitigate the problem. Purchase orders often took weeks to reach Amsterdam, Danzig, Liverpool or Virginia, and months would pass before ships laden with grain pulled into French port. Until the stabilization of the French food supply after 1860, shortages of grain and bread provoked civil unrest in front of bakeries and granaries alike, with much anxiety and debate from administrators demanding immediate action.⁶³

In the second half of the eighteenth century agrarian concerns increasingly occupy state attention – not only in France but across Europe. As political economy gains broad appeal – especially the relation of a wealthy peasantry and a wealthy state – the state begin to intervene in agriculture, masking fiscal concerns with Enlightenment benevolent paternalism. This growing appreciation of agriculture to the French nation is summarized under to issues: maximizing productive capacity and redistributing peasant surplus. Foucault notes in this regard how the town, market and police are an "essential unity" in the seventeenth and eighteenth centuries, "the horizon of politics as the primary model for state intervention in everyday life." He continues:

If the governmentality of the state is interested in the fine materiality of human existence and coexistence, of exchange and circulation, through the town and through problems

⁶² G. Grantham, "Agricultural Supply During the Industrial Revolution," *Journal of Economic History* 49 (March 1989): 43-72P. Hoffman, "Land Rents and Agricultural Productivity," *Journal of Economic History* 51 (1991): 771-805; L. Vardi, *The Land and the Loom* (Durham: 1993), 87-109; L. Tilly, "The Food Riot as a Form of Political Conflict in France," *Journal of Interdisciplinary History* 1 (1971): 23-57; C. Tilly, "Food Supply and Public Order in Modern Europe," in *The Formation of National States in Western Europe*, Charles Tilly, ed. (Princeton, 1975), 380-455; on infrastructure, see R. Price, *The Modernization of Rural France* (New York, 1983); see also P. Hoffman, *Growth in a Traditional Society* (Princeton, 1996);

⁶³ Miller, *Mastering the Market*, 7-8; P. Cheney, *Revolutionary Commerce* (Cambridge, 2010), 52; for more, see I. Hont, *Jealousy of Trade* (Cambridge, 2005), esp. ch. 1; H. Clark, *Compass of Society* (Lanham, 2007); Q. Skinner, "Meaning and Understanding in the History of Ideas," in *Meaning and Context*, J. Tully, ed. (Princeton, 1988), 57-67.

like health, roads, markets, grains, and highways, it is because commerce is thought of as the main instrument of the state's power and thus as the privileged object of a police whose objective is the growth of the state's force.

In this sense, if sovereignty is the conquest and control of territory, biopower is a similar form of control over time without changing the basic dynamics of landed power. Indeed, Machiavelli is still concerned to identify, protect and expand the sovereign territory without changing the nature of sovereignty: the safety, or *sûreté*, of the territory, and the safety of the sovereign who governs it. Rather than defending the ever-expanding limits of territorial sovereignty, the new question is epistemic, identifying only to allow proper circulation to occur. It is thus no longer the safety of sovereign and territory, but sécurité of population and government. Whether it is urban research, policies to mitigate famine and control the food supply, or strategies for containing epidemics, the primary model for mechanisms of security is not the subject-sovereign axis of passive obedience; instead, they are "physical processes," or processes natural insofar as they are intelligible. Rather than nullify with prohibition, they tend toward the "progressive self-cancellation of phenomena by the phenomena themselves," circumscribing discretely rather than impose proscriptive laws. Rather than express agency over others, security mechanisms reveal the necessary and sufficient conditions of action for those who govern.⁶⁴

⁶⁴ M. Foucault, *Security, Territory, Population*, 30, 32-33, 337, 338-339, esp. 66; see also Bodin, *Six Books of the Commonwealth*, ed., M. Tooley (Oxford: Basil, 1967), 7; J. Franklin, "Introduction to Jean Bodin," *On Sovereignty*, ed. J. Franklin (Cambridge: CUP, 1992), xxii; J. Franklin, "Sovereignty and the Mixed Constitution," in *Cambridge History of Political Thought, 1450-1700* (Cambridge, 1991), 299-328; see also J. Franklin, *Jean Bodin and the Rise of Absolutist Theory* (Cambridge, 1973); J. Riley, *The Seven Years War and the Old Régime in France* (Princeton, 1986); D. Stasavage, *Public Debt and the Birth of the Democratic State* (Cambridge, 2003); Jones, "Parish, Seigneurie and the Community of Inhabitants in Southern Central France during the Eighteenth and Nineteenth Centuries, *Past and Present* 91 (1981): 74-108; S. Kaplan, *Bread, Politics, and Political Economy in the Reign of Louis XV*, 2 vols. (The Hague, 1976), 1:72-86, 96; G. Cohen, "Institutions in Economic Analysis," in *Economics and the Historian*, T. Rawski, et al., eds. (Berkeley, 1989), 60; for more, see J. Schumpeter, *History of Economic*

Prior to 1789 the state had neither ministries of agriculture nor of the interior, with proposals for reform managed by the Controller-General of Finances. From Louis XIV initiatives to reform agriculture came and went with little effect. From the mid-eighteenth century, however, royal agrarian reforms turn on eliminating the customary rights of the commons. Historians often argue these state edicts represent state intensions – linking the expansion of power to the rise of agrarian individualism – but plans to restructure French agriculture were never fully implemented. With Colbert, the state had become adept at central planning and rational administration, all while the regulation of production, trade and state subsidies to the luxury trade were increasingly unpopular. Lost amid these critical positions, however, was a positive vision of the state advanced under Colbert; under conditions of international competition, France could succeed, prosper and conquer all through centralized state control of economics and politics. After Colbert other economic ministers enjoy less success, and after the Law Episode of the 1720s the French public grew wary of *systems*.

In the mid-eighteenth century, territorial France remained divided into many overlapping administrative zones. Except a large region of free trade known as the "five great farms" dating from 1598, the twenty-one zones of the *provinces réputées étrangers*, or "essential foreign provinces," enjoyed an array of exemptions and privileges. Although state policy focused on taxed goods circulating between zones, poor infrastructure and high transport costs often made internal markets unprofitable, especially when goods were big or bulky. According to Philip Hoffman, the most important upshot for the social organization of agrarian France – particularly its degree of specialization – was not the size or shape of parcels, but the availability and access to markets, itself complicated by various political and environmental divisions. Even if it was

Analysis, E. Schumpeter, ed. (New York, 1954); S. Kaplan, Provisioning Paris (Ithaca, 1984); and The Bakers of Paris and the Bread Question, 1700-1775 (Durham, 1996).

more efficient than generally held, the French tax system varied widely not only among regions and cities, but legal subjects and tracts of land in a complex set of late feudal privileges.

Regardless of whether it concerned the distance between producers and consumers, the limits of labor markets or taxation zones, or overlapping sovereignty and jurisdiction, the analytical space was a vital problem for the *ancien régime*. To transcend this uneconomic division of topographical space, the physiocrats tirelessly advocate for liberalizing trade and freeing markets from unwieldy state intervention: *laissez-faire*, *laissez-passer*, or free circulation of goods, the abolition of guild restrictions and the elimination of privileges in favor of a single tax on land. 65

Seeds and Machines

In Part IV, "Seed and Machine," my narrative migrates to the New World. Between biopower and capitalism, I seek to relate the history of political economy to the theory of biological systematics on the one hand, and the intersections of race and science on the other. In the first section I... In the second section I... In the fourth section, I...

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In Chapter 13, "Topsoil and Technology," I examine early colonial slavery, the rise of the yeomanry, and the experienced meanings of freedom in the context of abolitionism. Free people across North America enjoyed secure property rights, including the right to buy, sell and accumulate slaves, and to deploy such human capital as collateral. Labor relations evolved in specific ways across time and place, making generalizations odious. Ira Berlin notes, for

⁶⁵ P. Hoffman, *Growth in a Traditional Society*, 204; M. Dencecco, "Fragmented Authority on the European Continent, 1700-1815," *Social Science Research Network Working Papers* (2008), 14; for a different perspective, see M. Sonnenscher, *Work and Wages* (Cambridge, 1989), chap. 5; J. Markoff, "Violence, Emancipation and Democracy: The Countryside and the French Revolution," *American Historical Review* (1995) 100:2; J. Clark, "Marine Insurance in Eighteenth-Century La Rochelle," *French Historical Studies* 10.4 (1978): 577; N. Childs, *A Political Academy in Paris*, 1724-1731: The Entresol and its Members (Oxford: Voltaire, 2000), chs. 2 & 14; D. Goodman, *The Republic of Latters: A Cultural History of the French Enlightenment* (Ithaca: Cornell, 1994), 5-45.

example, while slaves worked longer and harder in the Chesapeake than indentured counterparts, over time they developed techniques to thwart the demands of masters and expand control over their lives and labor. From an agrarian perspective, property rights in slaves structured decisions on migration, cultivation and reproduction around a narrow set of economic interests rather than the range of motives, constraints and preferences operative in free societies. In this sense, American agrarian slavery flourished within and adapted to a wide range of biosocial environments ⁶⁶

The first European colonists in North America were mostly farmers and urban artisans who lived through the emergence of agrarian capitalism in Europe. Coming with a host of ambitions, they left the Old World behind with little preparation for the New World ahead, migrating to escape religious or political persecution. With few alternatives to selling their labor to live, most white colonists to the South in the seventeenth century, and the Middle colonies in the eighteenth century, indentured themselves to fund their way into the future. Despite having craft and manufacturing skills, most yearned for the security and independence associated with landed property. Contrary to conventional wisdom, until the early eighteenth century there was an acute scarcity of land in the New World; more precisely, rather than a scarcity in land, there was a scarcity of capital with which to make it habitable. The "howling wilderness" was hostile to all, and the Natives who controlled it posed an existential threat. The small parcels Europeans were able to control and improve required careful cultivation and constant defense. At the edge of survival, the earliest colonists lived with perpetual scarcity in a land of abundance.⁶⁷

⁶⁶ I. Berlin, *Many Thousands Gone* (Cambridge, 1998), 117-119, 135-137; R. Hurt, *Agriculture and Slavery in Missouri's Little Dixie* (Columbia, 1992), 68-70. J. Price, "Credit in the Slave Trade and Plantation Economies," in *Slavery and the Rise of the Atlantic System*, B. Solow, ed. (New York, 1995), 73-91.

⁶⁷ Konig, "Community Custom and the Common Law," 148-164; Morgan, *American Slavery, American Freedom*, 84, 171-173, 218-223; for more, see Cressy, *Coming Over*, chs. 2-3, 7; Innes, *Labor in a New Land*, ch. 4; Cronon, *Changes in the Land*, Turner, *Frontier in American History*, ch. 1.

By the end of the seventeenth century colonial conditions were such that land was more available, and by early next century most colonists could access land markets after having stolen enough from natives. This new reality of plentiful land intersected with the goals of the first generation of Anglo-Americans to create a new class with widespread landed property. Over the last half of the eighteenth century, some two-thirds to three-quarters of settlers were freeholders, owning land from western Pennsylvania to tidewater Virginia – in far greater numbers than in England. As the population grew, land became scarce again as yeomen moved along the ever-expanding frontier, improving land in the wilderness rather than falling into tenancy. Along these new frontiers, colonial farmers aspiring to the yeomanry were forced to recreate their class identity anew each time and place, reestablishing through the realm of necessity autonomy in the domestic, economic, and political spheres. In the initial phases of settlement few colonialists owned land, but squatted on land technically owned by others; after larger numbers of migrants were established, however, residents were forced to either register ownership or vacate. 68

Yet as long as land remained abundant, the proportion of colonial settlers owning land rose to relatively high levels; as the landed yeomanry expanded, so did the shortage of labor. Demographic patterns followed these trends: while Northerners relied on family labor and the odd wage-worker, Southerners solved the problem with slaves. Slavery was not limited to agriculture, of course; enslaved people worked in every sector where a large, disciplined labor force was needed. Despite slave artisans, traders, foresters and shipbuilders, the nineteenth-

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⁶⁸ D. Helms, "Soil and Southern History," *Agricultural History* 74 (2000): 734; J. Rubin, "The Limits of Agricultural Progress in the Nineteenth Century South," *Agricultural History* 49 (1975): 362-373; D. North, *The Economic Growth of the United States, 1790-1860* (New York, 1966), 122; C. Earle, *Geographical Inquiry and American Historical Problems* (Stanford, 1992), 88-152, 226-257; R. Fogel, *Without Consent or Contract*, 26, 34, 78, 162; Goldin and Sokoloff, "The Relative Productivity Hypothesis or Industrialization," *Quarterly Journal of Economics* (1984): 473; C. Hanes, "Turnover Cost and the Distribution of Slave Labor in Anglo-America," *Journal of Economic History* 56 (1996): 307-329; Wright, "Slavery and American Agricultural History," 530; see also E. Williams, *Capitalism and Slavery* (Chapel Hill, 1944), 6; K. Stampp, *The Peculiar Institution* (New York, 1956), 34, 54; G. Wright, "Slavery and American Agricultural History," *Agricultural* History, 77.4 (2003): 528;

century American South was overwhelmingly agrarian, and like its white population most slaves were agrarian slaves. Along with difficult disease environment, a political culture of decentralized government, limited infrastructure, and slavery itself, many factors contributed to the underdevelopment of the South. The delay in Southern industrialization, moreover, contributed to a distinctly white regional identity based on traditional agrarian norms. Southern slave masters invoked Jeffersonian democratic agrarianism as much as free yeomen farmers, exploiting its ambivalence to figure plantation agriculture as the culmination of his agrarian vision ⁶⁹

From the Revolution to the Civil War the highest concentrations of slaves were in the rich alluvial fields of the Mississippi valley, the stiff calcareous soils of the central Alabama-Mississippi "black belt," and the rich limestone hills of the Nashville Basin. Using county maps to compare land values with antebellum slave populations, Wright shows how these concentrations correlate to the value of the marginal product of labor, such that masters are able to outbid competitors for scarce slave labor. With certain exceptions, in much of North America the agricultural potential of land was the key factor in land values, providing the economic environment for profitable use of slave labor. Of particular importance are three regional clusters of counties with both high land values and high slave concentrations. South of the Ohio River, the bluegrass region of Kentucky was first cultivated by slaves growing tobacco in its deep fertile soils, the profits from which funded its nineteenth century transition to hemp – much valued by the British Navy for rope and rigging, and by merchants and farmers for bagging – which itself was closely linked to the rise of the cotton economy. Second, west of the Mississippi River – in a region known as "Little Dixie," the "Canaan of America," and a "farmer's paradise,"

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⁶⁹ Nash, *Quakers and Politics*, 15-19, 52-53; Pruitt, "Agriculture and Society," 112, map 8; Kulikoff, *Tobacco and Slaves*, 86-90; Dunn, "Servants and Slaves," 157-194.

slaves grew a variety of crops including tobacco, corn, oats, hemp, and wheat – a crop that expanded vigorously in the mid-nineteenth century with direct shipments to Europe during its many subsistence crises. Although this conjunction of wheat and slavery contrasts with much traditional wisdom of with the staple thesis, its intersection was entirely common in these regions. Not only were the limestone soils of the Shenandoah Valley of Virginia considered ideal for this leading regional cash crop, but the inventor of the wheat reaper himself called the Shenandoah home; that Cyrus McCormick's father grew wheat with slaves his entire life is but one instance of how slavery was by no means incompatible with a mixed farming regime of wheat, corn, oats and livestock. In this way, then, where natural economic conditions were favorable slavery as an institutional and organizational form was fully compatible with a wide range of crops and work patterns.⁷⁰

Despite the fact slaveowners in each region had easy access to the thriving slave markets of the South, agricultural production with slaves continued to expand as the clouds of war grew dark. These regional agrarian slaveries, moreover, prospered even as the centers of Southern agrarian slavery were surrounded by populations of free farmers, and where slave districts adjoined states where it was illegal. In short, Wright concludes it a serious error "to conflate slavery as an institution with narrowly specified geographic conditions associated with the South." What is more, evidence for the broad geographic range of slavery prompts the difficult question of whether it might have actually extended north of the Ohio River if not prohibited by the Northwest Ordinance of 1787. Not only is such an analysis challenging because of issues of counterfactual history, but – perhaps more importantly – it directly opposes the overwhelming

⁷⁰ Wright, "Slavery and American Agricultural History," 532; Hanes, "Turnover Cost and the Distribution of Slave Labor in Anglo-America," 324; Hurt, *Agriculture and Slavery*, 5, 51; P. Taylor, *Labor on the Land* (New York, 1981), 62; see also G. Wright, "American Agriculture and the Labor Market: What Happened to Proletarianization?" *Agricultural History* 62 (1988): 199-200.

historiographical presumption slavery did not "take root" in these areas because it was "not well-suited" to crops and conditions. From 1725 to 1750, however, slaves were the single most important source of labor in Northern fields and ports, no longer a supplement to an economy based on family labor or white servitude, but the largest element in the rural workforce. Slavery thus did not fade away slowly in any of these regions, and many former masters in fact continued to exert claims on former slaves long after emancipation. Slavery had no future not because of some ineffable geographic or agronomic incompatibility, but because in the final analysis it was a political matter.⁷¹

The correlation of slavery and land values in the Virginia Piedmont is instructive. In 1850 the value per improved acre on the largest slaveholding units was more than double the value on slaveless farms; by 1860 the ratio had climbed to two and a half. If differences in value reflect differences in potential yield, it is easy to understand how small and slaveless farms moved away from wheat as a cash crop, for expected yields per acre may not have been high enough to justify the risk and expense of cultivation. Moreover, presumably these rich wheat lands were allotted to large slaveowners on the basis of wealth. There is, however, an assumed premise in such an analysis, namely, an interpretation of such dynamics in light of already existing property rights. As such, the contrast between these slave-cultivated wheat farms and the problems of harvest in free states could not be any sharper: not only was harvest labor (and field work in general) the work of men, landowners were more concerned to find and retain labor of any type rather than managing harvest teams. If property rights in slaves facilitated commercialization of wheat, moreover, then visits to the Midwest by McCormick highlight another long-term contrast in labor systems; on trips to the Ohio Valley, for example, McCormick wrote home in lament "of

⁷¹ J. Simeone, *Democracy and Slavery in Frontier Illinois* (DeKalb, 2000), 42-46; Wright, "Slavery and American Agricultural History," 540; Berlin, *Many Thousands Gone*, 179; Hanes, "Turnover Costs," 307.

crops wasting for lack of labor to harvest them." Under slave-based mixed farming, that is, labor requirements were spread across the work year, whereas in states where slavery was illegal the problem of peak seasonality was solved in time with mechanization. The mere *invention* of the reaper would have been of relatively small consequence unless coupled with purposeful *development* and *diffusion*; together these constitute economic *innovation*, one of the driving forces behind long-term productivity growth. But this mainly occurred in the North, where mechanization allowed farmers to avoid the risks of non-family labor and so allowed them to expand the scale of operations in a sustainable manner. In this sense, property rights in machines provided an alternative to property rights in people, and the adaptation of slavery to wheat farming carried the implication Virginia agriculture was isolated from what was increasingly the mainstream of technological progress and productivity in American agriculture. The decision to abolish slavery was fully and above all a political issue, not the inevitable outcome of profit calculations or an inherent logic of economic development.⁷²

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In Chapter 14, "Horticulture and Hybridity," I examine how American agriculture intersected early republican experiences of slavery and freedom. Revolution consolidated the American yeomanry into a class of small producers whose political and economic independence legitimated traditional agrarian capitalism. As a majority of the able-bodied men needed to fight and win the war, yeomen demanded active participation in forming policies to maintain their

⁷² K. Keller, "The Wheat Trade on the Upper Potomac, 1800-1860," in Koons and Hofstra, eds., *After the Backcountry* (Knoxville, 2000), 27; Irwin, "Exploring the Affinity of Wheat and Slavery in the Virginia Piedmont," *Explorations in Economic History* 25 (1988): 314-315; C. Bushman, *In Old Virginia* (Baltimore, 2002), 34-36; R. Anderson and R. Gallman, "Slaves as Fixed Capital," *Journal of American History* 64 (1977): 24-26; Wright, "Slavery and American Agricultural History," 545; C. Purdue, Jr., T. Barden, and R. Phillips, eds., *Weevils in the Wheat* (Charlottesville, 1976), 26; W. Hutchinson, *Cyrus Hall McCormick* (New York, 1930), 208-209; H. Fleisig, "Slavery, the Supply of Agricultural Labor, and the Industrialization of the South," *Journal of Economic History* 36 (1976): 573-574; for more, see P. David, *Technical Choice, Innovation and Economic Growth* (Cambridge, 1975); A. Olmstead and P. Rhode, "Beyond the Threshold," *Journal of Economic History* 55 (1995).

social status. The result was a distinct producer ideology firmly embedded in the national consciousness that turned on possessive individualism and the rights of each abstracted from family and community. For increasing numbers of farmers, rural merchants, and country manufacturers, however, independence meant freedom to make contracts and use property regardless of traditional rights. In both North and South yeoman democracy required a polity of propertied farmers to maintain subsistence rights to land, and the difference of each to early agrarian capitalism involves the scope and character of their respective social relations. While yeomen shared with capitalists the desire for absolute control of land, the former were interested in commercial commodity markets only insofar as they sustained important noncommercial networks, using this power in turn to reinforce the patriarchal basis of the household economy. Moving west to maintain their identity, the easy acquisition and alienation of land undermined noncapitalist social relations. The ideals sustaining and legitimating their politics turned on an ideology of individualism that not only privileged capitalist economic development, but ultimately afforded women increasing levels of social authority that eroded the masculine domination of the household. By contrast, agrarian capitalists focused on staple cash-crops for export to foreign markets. To achieve greater market embeddedness, they developed and deployed novel financial instruments, bought expensive new machinery, and hired wage workers to perform many of the most important tasks of sowing and harvest. Agrarian capitalists cultivated larger profit margins by increasing productive capacities to support a bourgeois way of life based on landed property. In this way, the American yeomanry slowly, imperceptibly and perhaps unconsciously became petty agrarian capitalists despite continuing to promote the ideals of autarky and property long after they had any effectual economic meaning.⁷³

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⁷³ This vision is the opposite of Tocqueville in *Democracy in America*, 2:32-41, 99-108; Wilentz, "Many Democracies," 225; Kulik, "Dams, Fish, and Farmers," 25-50; Ashworth, *Agrarians and Aristocrats*, ch. 1; Hatch,

Reproducing American slavery on the western frontier, however, proved difficult. Not only was cotton cultivation relatively difficult, but establishing the authority of masters without the complex social structures of the original colonies was undermined by even its fragility there. After the slave revolt led by Nat Turner in 1831 the political tensions of slavery increased markedly. Soon thereafter, William Lloyd Garrison led a small band of abolitionists who began to reject African colonization as a solution and to demand an immediate end to slavery in the United States. The publication of Turner's *Confessions* not only supplied radical abolitionists with a new rhetorical tool, but its popularity was a direct impetus for Garrison to begin publishing other fugitive slave texts. Thus more than twenty years before war, rising concerns about Southern control of government, and Northern economic competition with slavery made abolitionism a viable political stance, first embraced by the Free Soil Party and only later by Republicans. Rooted in white and free black communities, these debates provided a fertile environs for the first significant body of black political theory. While white advocates provided a public platform for early black intellectuals – e.g., Frederick Douglas, William Wells Brown, Sojourner Truth, James Pennington, Lewis Clarke and Henry Bibb – as early as 1817 three thousand free blacks convened in Philadelphia to reject the American Colonization Society and declare solidarity with those still enslaved. Published shortly before Turner's rebellion, one of the first demands for immediate emancipation was David Walker's Appeal. Not only did free and fugitive blacks participate in the predominantly white American Anti-Slavery Association, it was

Democratization of Early Christianity, 14-26; C. Merchant, *Ecological Revolutions*, chs. 1-3; Unser, "Food Marketing and Interethnic Exchange," 279-310.

the influence of black abolitionists that eventually convinced Garrison to stand against colonization.⁷⁴

In 1833 the Improvement of Free People of Color discussed a plan by the American Colonization Society to resettle free black in Liberia. Instead they nevertheless recommend those inclined "to exchange a cultivated region for a howling wilderness" to instead "retire back into the western wilds, and fell the *native forests of America*, where the *plough-share* of prejudice has as yet been unable to penetrate the soil – and where they can dwell in peaceful retirement, under their own vine and under their own fig tree." Indeed, this suggestion to seek property, independence and equality by way of agriculture represents a deep susurrus of hope for many early nineteenth century Americans – free and slave alike – and forms the basis of the first significant body of black political theory in the U.S. In this sense, abolitionism was among other things a movement for agrarian reform that aimed to dismantle the American plantation complex and its hegemony over labor and nature. Invoking a vision of agriculture celebrated by Jefferson and other democratic agrarians, workers were no longer controlled by a master, but possessed the agency of labor and control over nature through individual liberty and political equality. Agriculture could thrive, many argued, only when the land was worked by free and equal citizens. Many black antislavery theorists developed a critique of agricultural slavery that included not only Jefferson, but a range of arguments from eighteenth century economists and farmers, to explore how American agrarian slavery affected both the meaning of nature and the incentives of stewardship. The result was a distinct tradition of black agrarianism emphasizing

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⁷⁴ Berlin, Generations in Captivity, 175-176; B. Quarles, Black Abolitionists (Oxford, 1969), 17-19, 200-219; E. Foner, Politics and Ideology in the Age of the Civil War (New York, 1980), 43-44;. J. Blackett, Building an Antislavery Wall (Baton Rouge, 1983), 48-49, 51.

the role of free labor and social equality as the basis for a vision of a just and sustainable relationship to the natural world.⁷⁵

If the fugitive slave narratives are any indication, early American slaves wanted nothing more from freedom than the opportunity to pursue the American agrarian ideal. In addition to Frederick Douglass, the slave narratives of William Wells Brown, Solomon Northrup, and Josiah Henson all report the dream of farming freely on American soil. And while some free blacks in the North held similar views, most apparently were less receptive and directly associated agriculture and slavery. Co-founding an experimental black farming community in Ohio, Lewis Woodson argued for agriculture as a "means of changing our present dependent and precarious position, into one of comfort and independence." To own house and land, flock and herd, Woodson continues,

inspires the possessor with a nobleness and independence of feeling, unknown to those in any other business. Every thing by which he is surrounded tends to the preservation of his morals, and the integrity and elevation of his soul. The lofty hill, the deep valley, the golden fields of waving grain, the green carpeted meadows of luxuriant grass, the bleating flocks and herds of cattle, the beautiful landscape, the painted flowers, the rich odors of the balmy breeze, are scenes and associations amongst which to dwell without the most exalted emotions, we must be either more or less than human.

Despite the virtues an agrarian life affords, he also warns farming requires persistence, skill and is not for everyone. But for those suffering under "the degrading drudgery and domineering of others," Woodson cannot but recommend to remove oneself and family to the countryside, thus freeing them from "exposure to the pollutions of idleness, vice, and crime" it produces. As we

⁷⁵ W. Pease and J. Pease, *Black Utopia* (Madison, 1963),16; Smith, *African American Environmental Thought*, 39-41, 42-43.

have already seen, Frederick Douglass argues on similar grounds that free black citizens turn to agriculture rather than working as servants of manufacturing or industry in the city. "Go to farming. Be tillers of the soil," he tells says. "Our cities are overrun with menial laborers, while the country is eloquently pleading for the hand of industry to till her soil, and reap the reward of honest labor." By such means former slaves can become "equally independent with other members of the community." It is impossible, he explained, "that we should ever be respected as a people, while we are so universally and completely dependent upon white men for the necessaries of life."

As descendants of Jeffersonian democratic agrarianism, Woodson and Douglass favor agriculture because of its potential to provide the economic self-sufficiency that was, again, a necessary condition of citizenship under republicanism. And, indeed, there is by now considerable evidence suggesting the rhetoric of black agrarianism accurately captured the common aspirations among slaves for homes and farms of their own. Environmental conditions under slavery promoted the right to property and independent food production as central markers of free status, for these were simultaneously and precisely the deprivations most keenly experienced under its institution. Through its identification of freedom with private property ownership and the control of personal labor, the mainstream tradition of democratic agrarianism resonated with the contours of black experience. This, combined with the rhetorical advantages it afforded in critiquing the southern plantation system and establishing their rights as full citizens, were the two primary reasons former agrarian slaves took up the mantle of democratic agrarianism. This agrarian critique of slavery is well-established by the time Woodson and Douglass take it up, especially in fugitive slave narratives. Written with a white attorney and

⁷⁶ L. Litwack, *North of Slavery* (Chicago, 1961), 175-177; Letter to the Editor, Colored American, February 7, 1838, *Black Abolitionist Papers*, 5 vols., C. Ripley, ed. (Chapel Hill, 1991), 3:257-258.

abolitionist, for example, the narrative of Charles Ball is significant for the ways it follows Federalist critiques in focusing primarily on the impact of slavery on the practices of agriculture, and for its early development of themes that become common in later slave narratives. That said, and while the narratives of slaves are generally more sensitive to such differences, Ball's narrative is characteristic of abolitionist literature more broadly in its elision of the regional differences of slavery. Southern planters and farmers were neither economically irrational nor necessarily poor agriculturists, Ball maintained; and the transient, disorderly landscapes of Southern agriculture are the result of both economic and ecological conditions. In tis way, the cause of environmental degradation and moral corruption in the South is caused by the ignorance, idleness, and moral depravity of the Southern aristocratic ethos built by the labor of slaves. Other fugitive and former slaves agreed: it was the moral corruption of slavery that devastated the land. Douglass, for example, famously contrasts the poverty of slave Maryland with the wealth of free Massachusetts. Like Ball, James Pennington connects slavery with soil exhaustion, relating stories about the rapid moral and ecological degeneration caused by slavery. In his analysis of the relative wealth of the North, Lewis Clarke argues slavery not only "curses the soil, the houses, the churches," but it "curses man and beast" as well. John Thompson also reasons that, in those regions populated by wealthy and humane planters, the soil is more fertile because the land is "less cursed by cruelty."⁷⁷

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⁷⁷ F. Douglass, "An Address to the Colored People of the United States" [1848] in *African-American Social and Political Thought, 1850-1920*, H. Brotz, ed. (New Brunswick, 1992), 212; see also "Letter to Harriet Beecher Stowe" [1853], in *Ibid.*, 222-223; E. Magdol, *A Right to the Land* (Westport, 1977), 12-13, 17-19; Ball, "Slavery in the United States," in *I Was Born a Slave*, 2 vols., Y. Taylor, ed. (Chicago, 1999), 1:265-266, 276, 279-280; Smith, *African American Environmental Thought*, 52-53; "The Fugitive Blacksmith; or, Events in the History of J.W.L. Pennington" [1849], *I Was Born a Slave*, 2:114, 147; "Narrative of the Sufferings of Lewis and Milton Clarke" [1846], in *Ibid.*, 1:634; "The Life of John Thompson, a Fugitive Slave" [1861], in *Ibid.*, 2:431.

In Chapter 15, "Husbandry and Industry," my narrative resumes in the aftermath of the U.S. Civil War. Between slavery and freedom, cotton was central to transforming the Atlantic plantation complex into legitimate global commerce. While immediately before abolition European demand for American cotton made its cultivation with slaves as lucrative as ever, limited biological ranges hardly made it the obvious candidate for a global industrial commodity. Technical spinning and weaving demanded standard fibers and mechanical processing, and textile manufacturers in Europe and the U.S. subjected every part of production to the institutional coercions of plantation and factory.

Cultivated from Asia to the Americas for millennia, the generic term *cotton* refers to any of the four sub-species of *Gossypium* that developed from single-cell filaments into long and durable fibers of contemporary cultivars. From the twelfth century, as trade networks increasingly connected the Middle East to Europe during the Crusades, cotton became widely available and its cloth already had a number of forms. In the seventeenth century, the British East India Company began importing cotton into England, which by then was already a popular consumer item. With a state-sponsored monopoly, English and Scottish weavers industrialized cotton manufacture by introducing labor-saving devices to make British production cheaper than Indian imports.⁷⁸

At this time textile production remained entirely a cottage industry based on household units in which men weaved and women spun. In 1764 James Hargreaves invented a machine that stimulated the fingers of spinners known as the "spinning jenny," and by 1773 Richard Arkwright created a "water-frame" allowing for the first all-cotton English fabric. Inventing a

⁷⁸ Zimmerman, *Alabama in Africa*, 22-23; for the full history, see C. Smith and J. Cothren, eds. *Cotton: Origin, History, Technology and Production* (New York, 1999); M. Mazzaoui, *The Italian Cotton Industry in the Later Middle Ages, 1100-1600* (Cambridge, 1981); J. Inikori, "Slavery and the Revolution in Cotton Textile Production in England," *Social Science History* 13 (1989): 343-379.

"mule" capable of spinning finer fabric than the water frame and stronger fabric than the spinning jenny, Samuel Crompton had a hybrid machine known as the "muslin wheel," which was automated with steam-power in 1785. This progressive mechanization led to textile work moving out from the home to the factory; dislocated from the household, the mechanization of textile manufacture removed worker control, and shifted ownership of the means of production (e.g., spinning wheels, looms, etc.) to factories. Hailing mechanization as a weapon in the class struggles of Britain in the early nineteenth century, chemist Andrew Ure declared in 1835 industrial progress "according to which every process peculiarly nice, and therefore liable to injury from the ignorance and waywardness of workmen, is withdrawn form handicraft control, and placed under the guidance of self-acting machinery." In particular, the spinning mule "strangled the Hydra of misrule" before it arrived in the factory.

European industrialization turned on the availability and price of American cotton.

Regional variations made the quality and quantity of cotton on the international market sporadic.

While littoral regions grew Sea Island cotton, Upland cotton was more desirable to textile manufacturers, but its fine seeds were unable to be mechanically extracted until Eli Whitney invented a gin in 1793. During the U.S. Civil War a "cotton famine" compelled English traders to shift back to India for its major supply. The necessity of quality control and its respective higher price led grower to exert more control on cultivation to appease increasingly vigilant markets. With dozens of varietals of American Upland cotton, growers could not replant seeds from the prior crops because of the possibilities associated with hybrid varieties and the uncertainty of characteristics, which led to growers having to purchase seeds bred under

⁷⁹ T. Ellison, *The Cotton Trade of Great Britain* (New York, 1968 [1886]), 14-32; A. Ure, *The Philosophy of Manufactures* (New York, 1967 [1835]), 367; A. Zimmerman, "The Ideology of the Machine and the Spirit of the Factory: Remarks on Babbage and Ure," *Cultural Critique* 37 (1997): 5-29; A. Clarke, *The Struggle for the Breeches: Gender and the Making of the British Working Class* (Berkeley, 1995).

controlled circumstances. Markets demanded a pure white color largely the result of harvest workers, as any cotton touching the ground was stained with soil. And since cotton bolls do not open all at once on any given plant, these pickers had to pass through the fields several times each season. Before mechanization after the Second World War, then, the precision required by mechanized textile production could only be met by hand labor. And lacking voice or hands, this metonymous market spoke through the very visible hands of planters and plantation managers, who exercised an equally meticulous control over cotton workers both enslaved and free.⁸⁰

Following Emancipation Southern agriculture was in complete disarray. Elites both black and white were anxious if the recently liberated would return to work without force. Everyone not formerly enslaved worried about millions of new citizens dispersing across the country from their former plantations. Most freedmen and women, however, wanted roughly the same as whites, namely, to own land and achieve economic autonomy to support a home and participate in community life. In this way, the core ideals of democratic agrarianism – i.e., the moral value of labor and the importance of landed property to citizenship – continued to proved a powerful framework within which elite fears and mass desires were fused in a single republican ideology. One common use of agrarian rhetoric after Emancipation, for example, was to dissuade freed families from migrating to the city. While even prior to war many black leaders worried about blacks concentrating in Northern cities, urging them instead to go "back to the land" and gain economic independence – afterward this theme changes decidedly to a more "stay on the land"

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⁸⁰ Zimmerman, Alabama in Africa, pp. 31-32; F. Logan, "India – Britain's Substitute for American Cotton, 1861-65," Journal of Southern History 24 (1958): 472-480; F. Logan, "India's Loss of the British Cotton Market After 1856," Journal of Southern History 31 (1965): 40-50; see also L. Gray, History of Agriculture in the Southern United States to 1860, 2 vols. (Washington, 1933); A. Lakwete, Inventing the Cotton Gin: Machine and Myth in Antebellum America (Baltimore, 2003); for the post-war history of the gin, C. Aiken, The Cotton Plantation South Since the Civil War (Baltimore, 1998); for more, see S. Leadbetter, The Politics of Textiles: The Indian Cotton-Mill Industry and the Legacy of Swadeshi, 1900-1985 (New Delhi, 1993); S. Mann, "The Rise of Wage Labor in the Cotton South: A Global Analysis," Journal of Peasant Studies 14 (1987): 226-242; D. Holley, The Second Great Emancipation: The Mechanical Cotton Picker, Black Migration, and How They Shaped the Modern South (Fayetteville, 2000).

tone, as the development of free black agrarian communities now seemed to many the most promising path to socioeconomic equality. In the decades following the war, Southern agrarian conditions continued a precipitous decline. Cotton prices plummeted in the depressions of the 1870s and 1880s, which with no other staple available, only caused the spread of its monoculture. There is little doubt these economic dynamics played a key role in how plantation slavery transformed under the pressures of an emergent industrial order ordered by free labor and rational resource exploitation. 81

The reliance on plantation cash-crops in the South had few advantages from an ecological perspective, and efforts at agricultural reform like crop diversification and soil conservation were often undermined by social and economic forces. Similar to the dynamics under slavery, landowners were often reluctant to integrate new agricultural practices requiring more management from them or more liberty to their tenants. While advances in the agricultural sciences were making new fertilizers available to solve the ever-present problem of soil fertility (e.g., guano), most Southern farmers – both black and white – not only lacked the knowledge or capital to implement such reforms, but most worked farms too small to justify such investments in the first place. Discouraged by such conditions, between 1865 and 1870 many freedmen left the countryside, taking their families to the cities of the South and beyond. In fact, over these five years alone the black populations of the ten largest Southern cities doubled. With sporadic surges of black migration from the South throughout the nineteenth century, the subsequent movements of the 1870s and 1890s never actually attracted much support because most freedmen and women either preferred or were compelled to seek a better, landed way of life in the South. By 1910 South blacks held 15 million acres of land, and nearly seventeen percent of Southern farmers were black. Such statistics are impressive then and now, but given the barriers

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⁸¹ Smith, African American Environmental Thought, 78; Litwack, Been in the Storm So Long, 317.

free black farmers faced at the time it is no surprise landownership and its relation to equality remained central to black intellectual discourse. By the 1890s the intellectual landscape had already become much more complex, however, which had important consequences for the development of black agrarianism. That said, in 1879 about 6,000 blacks traveled west in the "Kansas Exodus" and another mass emigration to the southwest occurred in 1888-90.⁸²

After the Civil War, in fact, the dominant trend was the concentration of land into increasingly fewer and more powerful hands. Former masters were determined to maintain the plantation system. Immediately following the war, several Southern states passed "Black Codes" that imposed social and political restrictions on freedmen and women to control their labor, enticing them away from the plantation itself while restricting their rights of contract and requiring all "vagrants" to sign a labor contract or face imprisonment. After ratification of the Fourteenth Amendment most such codes were ruled unconstitutional, Southern blacks nevertheless continued to suffer severe civil restrictions well into the next century. In response, plantation owners sought to reassert authority with contracts, preventing workers from leaving the land, holding meetings, or showing disrespect to whites under any circumstances. By 1900, for example, tenancy rates in the South rose to almost fifty percent, reaching eighty percent in the predominantly black cotton-growing regions.⁸³

There was more than slight resistance to such efforts on the part of free blacks. Most refused outright to work under any form of labor organization resembling the gang, and in time many were able to negotiate sharecropping agreements with former masters. Divided into

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⁸² Fite, Cotton Fields No More, 10, 21-29, 84-86; Foner, Reconstruction, 81; Painter, Exodusters, 184; Meier, Negro Thought in America, 59; T. Mitchell, "From Reconstruction to Deconstruction," Northwestern University Law Review 95 (2001): 526; Magdol, A Right to the Land, 211; Smith, African American Environmental Thought, 74.

⁸³ P. Daniels, Breaking the Land (Urbana, 1985), 163; W. Cohen, "Negro Involuntary Servitude in the South, 1865-1940," Journal of Southern History 42 (1976): 33-34; Hahn, A Nation Under Our Feet, 445; S. Stoll, Larding the Lean Earth, (New York, 2002), 173-213; Smith, African American Environmental Thought, 72; on the conservation movement, see S. Hays, Beauty, Health, and Permanence (Cambridge, 1993); R. Gottlieb, Forcing the Spring (Washington, D.C., 1993).

smaller farms, plantations were now either sold or leased to black farm families that paid the landlord with a portion of the crop. Ideally, sharecropping allowed farmers with little capital to borrow against the anticipated crop, thus in theory building equity in the land over time. In practice, however, the system gave landowners considerable control over what farmers could grow – usually cotton– that typically led the farmer further into debt. A certain number of freedmen and their families were able to assert increasingly more autonomy over their lives and labors over time. As Albert Cowdry notes, while widespread tenancy among free black farmers worked to mitigate the centralized control of plantation agriculture, lack of capital created an informal system of credit under which farmers borrowed against the expected income of a crop. Many plantation owners, moreover, obligated tenants to grow cotton to get credit, and so as farmers planted less land in subsistence crops, merchants kindly compensated for such goods at a humble markup. 84

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In Chapter 16, "Organism and Artifact," I conclude my analysis of the intersections of American agriculture and slavery. Southern economic development put slavery and modernity in direct conflict. Most scholars agree that slaves were generally less efficient than free workers, but for Gavin Wright the critical issue turned on slaves as capital. Even where slave and free labor was comparable, the size of investment in slaves precluded technological development, thus locating the advantage of slavery in its flexibility rather than efficiency. By contrast, John Ashworth argues ideological factors inhibited Southern industrialization, including fears technology was incompatible with maintaining slave society, reluctance to entrust slaves with expensive machines or dangerous tools, the higher social status of the plantation and the general ideal of agrarian autarky. From the 1840s not only did many claim the South could develop a strong

⁸⁴ Foner, Reconstruction, 135, 138-139; A. Cowdry, This Land, This South (Lexington, 1983), 107.

industrial economy, reformers pointed out how the region was already undergoing rapid modernization – e.g.. the industrialized sugar plantations of Louisiana. Yet most attempts to impose "clock-time and factory discipline" utterly failed, and bosses quickly regressed to the whip and either gave slaves only basic tools or declined to innovate altogether; in fact, some Northern factories specialized in cheap tools designed for the Southern slave market. There was, moreover, a myth technological innovation *prolonged* slavery was longstanding in the South; one such view, for example, held Eli Whitney actually perpetuated slavery by replacing primitive African "finger ginning," reinvigorating a moribund Southern economy, despite several other gins antedating his modification by several decades. Even when slaves worked as skilled laborers, then, innovation was discouraged, even as some masters took a different view and slaves made important contributions to agrarian technology. 85

In the context of the abolition the question of the relation of former slaves and machine technologies becomes urgent. As early at 1904 Ron Eglash notes a first obvious possibility, namely, integrating the master-slave metaphor within technological discourse – e.g., the dichotomy in double-pendulum clocks of master-slave mechanisms. The metaphor is then incorporated into descriptions of hydraulics, braking and feedback systems, and later into computing and biotechnology. As Armstrong notes, however, this metaphorical register does

⁸⁵ G. Wright, Slavery and American Economic Development (Baton Rouge, 2006), p. 121; J. Ashworth, Slavery, Capitalism and Politics in the Antebellum Republic (Cambridge, 1995), pp. 99-105; E. Fox-Genovese and E. Genovese, The Mind of the Master Class (New York, 2005), p. 285; for slavery and technology as incompatible, see S. Hodin, "The Mechanisms of Monticello: Saving Labor in Jefferson's America," Journal of the Early Republic 26:3 (2006): 377-418; N. Preyer, "Why Did Industrialization Lag in the Old South?," Georgia Historical Quarterly 55:3 (1971): 378-396; on their compatibility, see R. Aufhauser, "Slavery and Technological Change," Journal of Economic History 34:1 (1974):36-50; C. Degler, Place over Time: The Continuity of Southern Distinctiveness (Athens, 1997), pp. 52-54; on slavery as "progressive", see J. Daly, When Slavery Was Called Freedom (Lexington, 2002); on Whitney, see A. Whitridge, "Eli Whitney: Nemesis of the South," American Heritage 6:3 (1955): 4-11; on the gin myth, see A. Lakwete, Inventing the Cotton Gin, chs. 7-8; on antebellum Southern industrialism, see R. Follett, The Sugar Masters (Baton Rouge, 2005), pp. 102-122.; M. Smith, "Time, Slavery and Plantation Capitalism in the Antebellum American South," Past & Present 150 (1996): 142-148; E. Genovese, Roll, Jordon, Roll, p. 390; J. Carney, "Landscapes of Technology Transfer," pp. 19-48; for black contributions to technology, see P. James, "Invention and Innovation, 1619-1930," in Technology and the African-American Experience, B. Sinclair, ed. (Cambridge, 2004), pp. 49-70.

little more than reproduce the relations of subordination; more interesting is the perspective offered by using tools. Whereas Du Bois rejects the equation of workers and machines, Washington internalizes the instrumental logic of tools. Du Bois leaves metaphors of technology and slavery largely in tact, arguing for intellectual "mastery" by an educated elite and the historical, social association with slaves and tools. By contrast, Washington refuses precisely this relation of mastery and slavery, intellect and tool, for a more active reciprocity, which may have devalued academic study in a strategic pedagogy that departs significantly from the constant negation of Du Bois; exploiting the Lamarckianism implied by technological progress, Washington tries to free slaves from burdens of instrumentality. In this sense, while the slavemachine metaphor has gone largely unchallenged – with technology still aligned to the power to direct and control the work of others – it remains all the more important to note the metaphor works both ways: slaves replace machines and machines replace slaves. By the early twentieth century, moreover, as the New South becomes the last frontier of American technology, machines are themselves increasingly figured as slaves, with new electrical devices advertised as replacements for increasingly costly domestic labor. 86

As much political as technological, then, the question of mechanization formed a sharply divided debate well-before the cotton picker hailed the end of the mule. In 1936 two "prominent men" in the cotton business analyzed the potential of the new machine at a demonstration in Mississippi. While one held the picker would lead to "more profit and greater opportunities for the average southern farmer and his family," the other argued it would be "the death knell for

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⁸⁶ Armstrong, *Logic of Slavery*, pp. 80-81, 90; R. Eglash, "Broken Metaphor," *Technology and Culture* 28:2 (2007):360-369; D. Nye, *Electrifying America*, 271; J. Rifkin, *Beyond Beef: The Rise and Fall of the Cattle Culture* (New York, 1992), 45-46; J. Skaggs, *Prime Cut: Livestock Raising and Meatpacking in the United States* (College Station, 1986), 34-41; K. Thomas, *Man and the Natural World* (New York, 1983), 25-26; T. Saloutos and J. Hicks, *Agricultural Discontent in the Middle West, 1900-1939* (Madison, 1951), 90-100; on land prices, see W. Cochrane, *The Development of American Agriculture*, 2nd ed. (Minneapolis, 1993), 100; see also, S. Stoll, *The Fruits of Natural Advantage* (Berkeley, 1998).

family-sized farms and tenants, as it will encourage and develop large holdings." Among planters the most oft-cited factor in mechanization was the dramatic fluctuation of labor supply; in fact, this issue cut across regions and decades. By the 1930s Southern landlords were disgruntled about the unwillingness of tenants and croppers to work, with the problem only getting worse over time. In this way, that factory workers are for Du Bois a "mechanical draught horse" suggests the metaphor of slaves and mules requires further analysis. As Peter Garnsey notes, the "fuzzy" distinction made by Aristotle between slaves, animals and people is exploited and sustained by abolitionist discourse – e.g., in claiming masters cared for horses better than slaves. But the crux of horsepower was work, linking blacks and draft animals to a non-productive economy that can be reorganized by a form of labor obviating the natural limits of the body.⁸⁷

As Tim Armstrong notes, the horse-slave equation works in a more fundamental way by linking both horse and slave to the question of the amount of work that can be extracted from their bodies, and so the connection between power and *techne* more generally. In the 1920s, for example, R.F. Lefebvre de Noëttes argued the lack of horsepower made ancient slavery a necessity. Examining Greek and Roman draft harnesses, he concludes a strong horse on a good would still require slaves to supplement trade cartage; only in the tenth century with the introduction of the modern horse collar was waste and stagnation overcome. While the details of this claim have been contested, notable is the consistency of de Noëttes with respect to the horse-slave equation. According to Armstrong, it is as if autonomous technological development is impossible, as if humans were yoked to horses or slaves as mere extensions of their power. A similar conclusion is reached by Carroll Daughterty who, before becoming a well-known labor

⁸⁷ Garnsey, *Ideas of Slavery from Aristotle to Augustine*, p. 111; H. Ritvo, *The Animal Estate* (Cambridge, 1987), p. 20; D. Levy, *How the Dismal Science Got Its Name* (Ann Arbor, 2001), p. 97.

economist, concluded his 1927 dissertation with an analysis of the shift from the scale of the horse. Daughterty calculates power take-off ratios increased six-fold between 1899 and 1919, accompanied by the dramatic fall in work animals.⁸⁸

In the United States, the association of slavery and horsepower found prominent voice in the movement known as technocracy, which began in the early 1930s amid the economic uncertainty and social unrest of the Great Depression. During a time when the Five-Year Plan of the Soviet Union offered an ideal planned economy, technocrats rose to attention in a series articles from November 1932. By the next year, their basic premise of shifting economic analysis from *society* to *energy* had widespread appeal, and leaders turned to developing a rational calculus to address the major issues of public policy. With society as energy, technocrats calculate the "human machine" can work "approximately at the rate of 1/10 horse-power" per eight-hour day. Tracing the seven-horsepower engine in 1712 to marine engines of the 1890s, they estimate energy conversion rates increased "234,000 times the rate of the human engine." By 1933 turbines are an incomprehensible "3,000,000 times the output of a human being." There is thus an asymmetry in people and power: "If the total one billion installed horse-power of the United States were operated to full capacity, its output would be equivalent to the human labor of five times the present world population." With intricate, fascinating graphs technocrats show how "that low-rate engine of conversion, the human being," is displaced as powers of industrialism facilitate higher productivity and lower employment, figured simultaneously as a release from and multiplication of slavery. In 1955 the group reports:

⁸⁸ R. Lefebvre de Noëttes, *La force motrice animale à travers les âges*, reprinted as *L'attelege*, 2 v. (Paris, 1931 [1924]), pp. 185-186, C. Daughterty, "The Development of Horse-Power Equipment in the U.S.," (PhD diss., University of Pennsylvania, 1927), both cited at Armstrong, *Logic of Slavery*, pp. 93-94; for a rebuttal of Noëttes, see J. Spruyette, *Early Harness Systems*, trans. M. Littauer (London, 1983);

The use of non-muscular has freed man from toil, has replaced human labor. A new kind of slave has taken over the old slaves' jobs by the millions. In fact, there are so many of these slaves in North America that they outnumber all the human slaves on earth by far. These new slaves are very different from the old. They neither buy nor consume the goods they produce; there is no limit to their working hours; they do not tire; and they can accomplish things the old slaves never dreamed of or thought possible....As you probably have guessed, the new slave is the kilowatthour; the old slave is the man-hour.

In droll sentences typical of the technocratic "facts," it continues by arguing wealth is created "by converting available energy into use-forms and services." On this basis they provide a "new methodology" in wealth creation: the transformation of energy into "complete uselessness," or "total consumption." To be wealthy "is not to own a car but to wear it out." In this sense, the final conversion of slave value – "dead" wealth in the fixed capital of slaves – is an embodied form of energy distributed at the breach of production and reproduction, machines and bodies. ⁸⁹

Ralph Ellison explores this bifurcation of self between action and instrument that remains largely implicit in the work of Washington and Du Bois. While the novel is of course replete with allusions to Washington, yet Alan Hyde argues a perhaps more significant influence on Ellison is the post-Taylorist shift in factory theory. While legal constructions of the human body frequently use mechanical metaphors, after 1929 studies of industrial relations increasingly emphasize the need for cooperation rather than direct managerial coercion. For Ellison, a focus on the system as a whole – rather than the discrete tool itself – is reflected in his emphasis in the novel on electrical systems, stolen power, and electroshock therapy on the one hand, and the

⁸⁹ H. Smith et al., *Introduction to Technocracy* (New York, 1933), pp. 20-21, 42; "Why Technocracy?" Information Brief No. 28, 1955 (http://technocracy.org); Armstrong, *Logic of Slavery*, p. 95; for the roots of this movement, see T. Veblen, *The Engineers and the Price System* (1921); see also D. Bell, "Veblen and the Technocrats: On *The Engineers and the Price System*," in *The Winding Passage* (New Brunswick, 1991), pp. 69-90; H. Elsner, *The Technocrats: Prophets of Automation* (Syracuse, 1967).

⁹⁰ A. Hyde, *Bodies of Law* (Princeton: Princeton University Press, 1997), chs. 1, 2.

totalizing, omniscient Communist Party on the other. Despite these themes, however, for a novel so deeply concerned with the ways the black subject is reduced to a puppet, set in motion by the actions of others and used for their ulterior ends, engagement with Washington's philosophy of technology is nevertheless central. To take only one example, the paint factory scene immediately becomes a parody not only of the construction of whiteness, but of the paranoia at work in any attempt to master the body as a machine. Working alone in the basement, Lucius Brockway identifies completely with the industrial process and believes he contributes a particular quality – namely, the "sweetening" of the pain – which proves elusive to engineering alone. In this sense, there is perhaps a version of Washington at work in his declaration that "[t]hey got all this machinery, but that ain't everything; we are machines inside the machine."

Evoking an objection not unlike behaviorism, Ellison counters the metaphorical matrix in which the self is as if the director of a machine; without a homunculus within, however, this creates a type of self-referential infinite regress where the controller evades any attempt to identify a final point of origin. Brockway's declaration of a special power in forming the base of the paint involves claiming a particular place in the economy which is linked to the history of slavery – he is at one with his boilers [he identifies with his technology]; he claims a foundational relationship with the "Old Man," the owner of the company; "I been here since there's been a here – even helped dig the first foundation." He is irreplaceable, non-fungible, dependable, and even understands the racial logic of the product ("If It's Optic White, It's the Right White"), but all at the price of being an instrument bound to his position at the "base." That is also why he is mad, paranoid, willing to blow up his own engine room in attempting to kill the narrator. His paranoia is configured by his identification with the machine. Suspicious

⁹¹ D. Nye, *Electrifying America: Social Meanings of a New Technology* (Cambridge, 1990), p. 271; ⁹¹ R. Ellison, *Invisible Man* (London: Penguin, 1987 [1952]), p. 170.

that he is being replaced by a Tuskegee-trained engineer, he asks about the narrator's education, and is only somewhat mollified to learn it is "just a liberal arts course. No trades." Brockway is figured as a Tar Baby, smelling of pine and looking "as though he had been dipped in pitch" – a signal of danger to the African American for whom the tar baby is that which cannot be manipulated by hand or tongue. He elicits the narrator's hidden name (unheard by the reader) and finally blows his up by having him open the wrong valve: "The white one, fool, the white one!" It is as if the whole factory has become an influencing machine informing a hyperconnected paranoia in which every instrument attacks it controller. The orgasmic destruction following his final acts ("a wet blast of black emptiness that was somehow a bath of whiteness") again suggest a narcissistic investment in the machine as phallic object as well as racial coding. The narrator's reference to the "hard, mechanical isolation of the hospital machine" that follows reinforces this critique. 92

For Ellison, the path into technology is almost impossible to dissociate from an engrossing systematicity; all that can be offered by way of resistance is the marginality suggested by tinkering with Monopolated Light & Power's cables – sabotage rather than involvement.

Brockway's layering of himself in the machine is similarly a response to and an emblem, in the turn to paranoia, of his narcissistic powerlessness and assertive emptiness. He is trapped in a machine that at once his own and the tool of his own imprisonment. 93

⁹² R. Ellison, *Invisible Man* (London: Penguin, 1987 [1952]), p. 177, 170, 171, 187, 275, 169, 181.

⁹³ A classic case of paranoia is that of a "negro paranoiac" who builds an elaborate influencing machine, a "copulation fetish" that is designed to compensate for his impotence.; Kempf annotates the machines sexual symbolism: its emission of "manna," its "perpetual motion," the religious symbolism in which it is wrapped. E. Kempf, *Psychopathology* (St. Louis, 1921), pp. 423-435; cited in Armstrong, *Logic of Slavery*, pp. 87-88, 90. N.B. This is how capitalism is slavery.

BIBLIOGRAPHY

- Aaby, P. "Engels and Women." Critique of Anthropology 3.9-10 (1977): 25-53.
- Aaron, D. "Early Rabbinic Exegesis on Noah's Son Ham and the So-Called Hamitic Myth." *Journal of the American Academy of Religion*, LXIII:4 (1996): 721-757.
- Abbott, D. "The Political Economy of New Slavery." Capital & Class 84 (2004): 220.
- Adams, R. "Agriculture and Urban Life in Early Southwestern Iran." *Science* 136 (1962): 109-122.
- -----. Heartland of the Cities. Chicago: University of Chicago Press, 1981.
- ----- Land Behind Baghdad: A History of Settlement on the Diyala Plains. Chicago: Transaction, 1965.
- ----- "Patterns of urbanization in early Southern Mesopotamia," in *Man, Settlement and Urbanism*. P. Ucko, R. Tringham, and G. Dimbleby, eds. London: Duckworth, 1972.
- ----- "Strategies of maximization, stability, and resilience in Mesopotamian society," *Proceedings of the American Philosophical Society* 122 (1978): 329-335.
- -----. The Evolution of Urban Society: Early Mesopotamia and Prehispanic Mexico. Chicago: Transaction, 1966.
- Adams, R. and T. Jacobsen, "Salt and Silt in Ancient Mesopotamian Agriculture," in P. Ucko, R. Tringham, and G. Dimbleby, eds., *Man, Settlement, and Urbanism*. London: Duckworth, 1972.
- Adams, R. and H. Nissen. *The Uruk Countryside*. Chicago: University of Chicago Press, 1972.
- Adams, W. The Philosophical Roots of Anthropology. Stanford: USCL, 1998.
- Agamben, G. *Homo Sacer*. D. Heller-Roazen, trans. Stanford: Stanford University Press, 1998.
- -----. *The Open: Man and Animal.* K. Attell, trans. Stanford: Stanford University Press, 2003.
- Aiello, L. and Wheeler. "The Expensive-Tissue Hypothesis." *Current Anthropology* 36 (1995): 199-221.

- Aiken, C. *The Cotton Plantation South Since the Civil War*. Baltimore: Johns Hopkins University Press, 1998.
- Alesina, A., I. Giuliano and N. Nunn, "On the Origins of Gender Roles." Working Paper 17098, National Bureau of Economic Research, May 2011.
- Alexander, N. *History of the Colored Race in America*. Atlanta: Negro Universities, 1968.
- Allbright, W. From the Stone Age to Christianity. Garden City: Doubleday, 1957.
- Allen, R. "Agriculture and the Origins of the State in Ancient Egypt." *Explorations in Economic History* 42.2 (1997): 135-154.
- Allen, R. *Enclosure and the Yeoman*. Oxford: Oxford University Press, 1992.
- Allen, T. *The Invention of the White Race, vol. 1: Racial Oppression and Social Control.* New York: Verso, 1994.
- Almeida, J. Justice As An Aspect of the Polis Idea in Solon's Political Poems: A Reading of the Fragments in Light of the Researches of New Classical Archeology. Leiden: K.W. Welwei, 2003.
- Alt, A. "The God of the Fathers," in *Essays on Old Testament History and Religion*, R. Wilson, trans. New York: Doubleday, 1968.
- Applebaum, S. "Agriculture in Roman Britain." *Agricultural History Review* VI (1958): 66-86.
- Appleby, A. Famine in Tudor and Stuart England. Stanford: Stanford University Press, 1978.
- -----. "Grain Prices and Subsistence Crises in England and France, 1590-1740." *The Journal of Economic History* 39:4 (1979): 865-887.
- Appleby, J. *Economic Thought and Ideology in Seventeenth Century England*. Princeton: Princeton University Press, 1978.
- Anderson, K. "'The beast within': race, humanity, and animality." *Environment and Planning D: Society and Space* 18:3 (2000): 301-320.
- Anderson, B. and H. Borns, *The Ice Age World: An Introduction to Quaternary History and Research with Emphasis on North America and Northern Europe during the Last 2.5 Million Years*. Oslo: Scandinavian University Press, 1994.
- Anderson, P. *Lineages of the Absolutist State*. London: Verso, 2013.

- -----. Passages from Antiquity to Feudalism. London: Verso, 1996.
- Anderson, R. and R. Gallman. "Slaves as Fixed Capital." *Journal of American History* 64 (1977): 24-26.
- Andrewes, A. The Greek Tyrants. London: Harper & Row, 1956.
- Arieh, B. "Two cultures in southern Sinai in the third millennium BC." *Bulletin of the American Schools for Oriental Research* 262 (1986): 27-54.
- Arieh, I. "New evidence on the relations between Canaan and Egypt during the Protodynastic period." *Israel Exploration Journal* 34 (1984): 20-23.
- Aristotle. *Rhetoric*. W. Roberts, trans. *The Complete Works of Aristotle*, 2 vols. J. Barnes, ed. Princeton: Princeton University Press, 1984.
- ----- *Politics*. B. Jowett, trans. *The Complete Works of Aristotle*, 2 vols. J. Barnes, ed. Princeton: Princeton University Press, 1984.
- Armstrong, T. *The Logic of Slavery*. Cambridge: Cambridge University Press, 2012.
- Arneil, B. *John Locke and America: The Defence of English Colonialism.* Oxford: Oxford University Press, 1996.
- Ashworth, J. Agrarians and Aristocrats: Party Political Ideology in the United States, 1837-1846. Cambridge: Cambridge University Press, 1987.
- -----. *Slavery, Capitalism and Politics in the Antebellum Republic*. Cambridge: Cambridge University Press, 1995.
- Atmar, W. "On the role of males." Animal Behavior 41 (1991): 195-205.
- Augustine, *The City of God*. London: Routledge, 1984.
- Aufhauser, R. "Slavery and Technological Change," *Journal of Economic History* 34:1 (1974):36-50.
- Baeck, L. The Mediterranean Tradition in Economic Thought. London: Routledge, 1994.
- Baer, K. "An Eleventh Dynasty Farmer's Letters to His Family." *Journal of the American Oriental Society* 83 (1963): 1-19.
- ----- "The Low Price of Land in Ancient Egypt." *Journal of the American Research Center in Egypt* 1 (1962): 25-45.

- Bakan, D. And They Took Themselves Wives. San Francisco: HarperCollins, 1979.
- Baker, R. Sperm War: Infidelity, Sexual Conflict and Other Bedroom Battles. New York: Basic Books, 1996.
- Baldwin, J. *The Government of Philip Augustus: Foundations of French Royal Power in the Middle Ages.* Berkeley: University of California Press, 1991.
- Bales, K. *Understanding Global Slavery*. Berkeley: University of California Press, 2005.
- Bales, K. and R. Soodalter. *The Slave Next Door*. Berkeley: University of California Press, 2009.
- Baldwin, N. *Henry Ford and the Jews: The Mass Production of Hate*. New York: Public Affairs, 2002.
- Balter, M. "Archaeology: The Tangled Roots of Agriculture,. *Science* 327 (1964): 404–406.
- Barfield, T. The Nomadic Alternative. Englewood Cliffs: Prentice-Hall, 1993.
- Barlett, P. "Adaptive Strategies in Peasant Agricultural Production." *Annual Review of Anthropology* 9 (1980): 545-573.
- Barth, F. Nomads of South Persia. Boston: Boston University Press, 1962.
- Bar-Yosef, O. "The Contributions of Southwest Asia to the Study of the Origins of Modern Humans," in *Origins of Anatomically Modern Humans*, M. Nitecki and D. Nitecki, eds. New York: Springer, 1994.
- ----- "Seasonality among Neolithic hunter-gatherers in southern Sinai," in *Animals and Archaeology*, vol. 3. *Early Herders and their Flocks*. J. Clutton-Brock and C. Grigson, eds. London: British Archeological Reports, 1984.
- -----. "The Natufian in the Southern Levant," in *The Hilly Flanks*. C. Young, T. Smith and Mortensen, eds. Chicago: Oriental Institute of University of Chicago, 1982.
- Bar-Yosef O. and A. Khazanov, eds. *Pastoralism in the Levant*. Madison: University of Wisconsin Press, 1992.
- Batto, B. Studies on Women at Mari. Baltimore: Johns Hopkins University Press, 1974.
- Bauman, J. Modernity and the Holocaust. Ithaca: Cornell University Press, 1989
- Baumann, H. "The Division of Work According to Sex in African Hoe Culture." Africa:

- Journal of the International African Institute 1.3 (1928): 289-319.
- Bayliss-Smith, T. *The Ecology of Agricultural Systems*. Cambridge: Cambridge University Press, 1982.
- Beck, L. "Herd Owners and Hired Shepherds: The Qashqa'I of Iran." *Ethnology* 19 (1980): 327-351.
- Becker, E. The Denial of Death. New York: Penguin, 1973.
- Beier, A. Masterless Men: The Vagrancy Problem in England, 1560-1640. London: Routledge, 1985.
- Bell, D. "Veblen and the Technocrats: On *The Engineers and the Price System*," in *The Winding Passage*. New Brunswick: Rutgers University Press, 1991.
- Bell, M. *Primitivism*. London: Methuen Press, 1972.
- Bender, B. "Gather-Hunter to Farmer." World Archaeology (1978): 204-222.
- Bennett, Jr., L. *Before the Mayflower: A History of the Negro in America*. Chicago: Johnson Publishing, 1962.
- Benveniste, E. and J. Lallot. *Indo-European Language and Society*. Oxford: Miami University Press, 1973.
- Berlin, I. *Generations in Captivity: A History of African-American Slaves*. Cambridge: Harvard University Press, 2009.
- Berlin, *Many Thousands Gone: The First Two Centuries of Slavery in North America*. Cambridge: University of Press, 1998.
- Berry, W. *The Gift of Good Land: Further Essays, Cultural and Agricultural.* San Francisco: North Point, 1981.
- Best, S. *The Fugitive's Properties: Law and the Poetics of Possession.* Chicago: University of Chicago Press, 2004.
- Bewer, J. *The Literature of the Old Testament*. New York: Columbia University Press, 1962 [1922].
- Biggs, L. The Rational Factory. Baltimore: Johns Hopkins University Press, 1998.
- Binford, L. "Post-Pleistocene Adaptations," in *New Perspectives in Archaeology*. S. Binford and L. Binford, eds. Chicago: Aldine, 1968.

- Black, E. *IBM and the Holocaust: The Strategic Alliance between Nazi Germany and America's Most Powerful Corporation*. New York: Aware, 2001.
- -----. The Transfer Agreement: The Untold Story of the Secret Agreement Between the Third Reich and Jewish Palestine. New York: Macmillian, 1984.
- Blackburn, R. *The Making of New World Slavery: From the Baroque to the Modern,* 1492-1800. London: Verso, 1998.
- Blackett, J. *Building an Antislavery Wall*. Baton Rouge: Louisiana State University Press, 1983.
- Bleier, R. Science and Gender: A Critique of Biology and Its Theories on Women. New York: Pergamon, 1984.
- Bloch, M. *Rural French History: An Essay on its Basic Characteristics*. J. Sondheimer, trans. Berkeley: University of California Press, 1970.
- ------ "The Rise of Dependent Cultivation and Seigniorial Institutions," in *The Cambridge Economic History of Europe, vol. 1, Agrarian Life of the Middle Ages.*J. Clapham and E. Power, eds. Cambridge: Cambridge University Press, 1942.
- Blumler, M. "Ecology, Evolutionary Theory and Agricultural Origins," in *The Origins and Spread of Agriculture and Pastoralism in Eurasia*. D. Harris, ed. Washington, D.C.: Smithsonian Institution Press, 1996.
- Blumler, M. and R. Byrne. "The Ecological Genetics of Domestication and the Origins of Agriculture." *Current Anthropology* 32.1 (1991): 23-54.
- Bodin, J. Six Books of the Commonwealth, ed., M. Tooley. Oxford: Basil, 1967.
- -----. On Sovereignty, ed. J. Franklin. Cambridge: Cambridge University Press, 1992.
- Boehm, C. *Hierarchy in the Forest: The Evolution of Egalitarian Behavior*. Cambridge: Harvard University Press, 2009.
- Bogucki, P. "Animal Traction and Household Economies in Neolithic Europe." *Antiquity* 67 (1993): 492-503.
- Bogucki, P. The Origins of Human Society. Oxford: Wiley-Blackwell, 1999.
- Bois, G. The Crisis of Feudalism. Cambridge: Cambridge University Press, 1984.
- Booth, W. Households. Ithaca: Cornell University Press, 1993.
- Borgerhoff-Mulder, M. et al., "Pastoralism and Wealth Inequality." Current

- Anthropology 51.1 (2010): 35-49.
- Borowski, O. Agriculture in Iron Age Israel. Winona Lake: Eisenbrauns, 1987.
- Boserup, E. The Conditions of Agricultural Growth: The Economics of Agrarian Change Under Population Pressure. Chicago: Transaction, 2005.
- -----. Woman's Role in Economic Development. London: Earthscan, 2007 [1970].
- Bottéro, J. *Mesopotamia: Writing, Reasoning and the Gods.* Z. Bahrani and M. van de Mieroop, trans. Chicago: University of Chicago Press, 1995.
- Boulding, E. "Public Nurturance and the Man on Horseback," in *Face to Face: Mothers, Fathers, Masters, Monsters*. M. Murray, ed. Westport: Greenwood, 1984.
- -----. *The Underside of History: A View of Women Through Time*. Greenwood: Westview Press, 1976.
- Bourdieu, P. Distinction, R. Nice, trans. Cambridge: Harvard University Press, 1990.
- -----. *Masculine Domination*. R. Nice, trans. Stanford: Stanford University Press, 2002.
- ----- Logic of Practice. R. Nice, trans. Stanford: Stanford University Press, 1992.
- -----. *In Other Words*. M. Adamson, trans. Cambridge: Harvard University Press, 1990.
- Bowles, S. "Did warfare among ancestral hunter-gather groups affect the evolution of human social behaviors?" *Science* 324 (2009): 1293-1298.
- Bowles, S., E. Smith and M. Borgerhoff-Mulder. "The Emergence and Persistence of Inequality in Premodern Societies." *Current Anthropology* 51.1 (2010): 7-17.
- Bowles S. and H. Gintis. *A Cooperative Species*. Princeton: Princeton University Press, 2011.
- Braidwood, R. "The Agricultural Revolution." Scientific American 203 (1960):130-141.
- Braidwood, R. and L. Braidwood, eds. *Prehistoric Archaeology Along the Zagros Flanks*. Chicago: Oriental Institute of the University of Chicago, 1983.
- Brass, T. *Towards a Comparative Political Economy of Unfree Labor*. London: Frank Cass, 1999.
- Braude, B. "The Sons of Noah and the Construction of Racial Identity in the Medieval

- and Early Modern Periods," in *Constructing Race: Differentiating People in the Early Modern World, 1400-1700.* Williamsburg: William and Mary, 1996.
- Braudel, F. Civilization and Capitalism, 15th-18th Centuries: The Structure of Everyday Life. S. Reynold, trans. New York: Harper and Row, 1982
- -----. The Mediterranean in the Ancient World. London: Penguin UK, 2002.
- -----. The Mediterranean and the Mediterranean World in the Age of Philip II. Berkeley: University of California Press, 1995.
- Breitman, J.. *Architect of Genocide: Himmler and the Final Solution*. New York: Alfred Knopf, 1991.
- Briffa, K. and T. Osborn. "Blowing Hot and Cold." *Science* 22 March (2002): 2227-2228.
- Briggs, A. A Social History of England. London: Penguin, 1999.
- Briggs, B. Early Modern France, 1560-1715. Oxford: Oxford University Press, 1977.
- Bronson, B. "The Earliest Farming: Demography as Cause and Consequence." *Population, Ecology and Social Evolution* (1975): 53-78.
- Brotz, H., ed. *African-American Social and Political Thought, 1850-1920.* New Brunswick: Rutgers University Press, 1992.
- Brownlow, R. ed. *Lectures on Slavery and Serfdom in Europe*. Atlanta: Negro Universities Press, 1969.
- Brunt, P. Italian Manpower, 225 BC-AD 14. Oxford: Oxford University Press, 1971.
- Brunt, P. "Italian Aims at the Time of the Social War." *The Journal of Roman Studies* (1965): 90-109.
- Bryson, R. "On Climates of the Holocene," in *Man and the Mid-Holocene Climactic Optimum*. N. Mckinnon and G. Stuart, eds. (Alberta, 1987), 1-13.
- Buber, M. I and Thou. W. Kaufmann, trans. New York: Martin Books, 2010 [1937].
- Buck-Morss, S. "Envisioning Capital: Political Economy on Display." *Critical Inquiry* 21 (1995): 434-467.
- -----. *Hegel, Haiti, and Universal History*. Pittsburgh: University of Pittsburgh Press, 2009.

- Buckland, W. The Roman Law of Slavery: The Condition of the Slave in Private Law from Augustus to Justinian. Cambridge: Lawbook Exchange, 1908.
- Bud, R. *The Uses of Life: A History of Biotechnology*. Cambridge: Cambridge University Press, 1994.
- Burkert, W. Greek Religion, J. Raffan, trans. Cambridge: Harvard University Press, 1985.
- Burns, T. *Rome and the Barbarians, 100 BC AD 400.* Baltimore: Johns Hopkins University Press, 2003.
- Bushman, C. In Old Virginia. Baltimore: Johns Hopkins University Press 2002.
- Buss, D. The Evolution of Desire: Strategies of Human Mating. New York: Basic, 1994.
- Butler, J. Gender Trouble. New York: Routledge, 1993.
- Butzer, W. Early Hydraulic Civilization in Egypt. Chicago: University of Chicago Press, 1976.
- Calarco, M. Zoographies: The Question of the Animal from Heidegger to Derrida. New York: Columbia University Press, 2008.
- Callahan, E. "Blood, Sweat and Wealth." *History of Political Thought* 17.1 (1996): 21-35.
- Calvin, J. Commentaries on the First Book of Moses called Genesis, 2 vols. J. King, trans. Grand Rapids: Eredmans, 1948.
- Campbell, J. *The Masks of Gods: Primitive Mythology*. New York: Arkana, 1964.
- Campbell, J. and B. Moyers. *The Power of Myth*. New York: Random House, 1988.
- Campbell, M. *The English Yeoman in the Tudor and Early Stuart Age*. New Haven, Yale University Press, 1967.
- Carey, D. "Locke, Travel Literature and the Natural History of Man." *Seventeenth Century* 11 (1996): 259-280.
- Carneiro, R. "A Theory of the Origin of the State." Science 169.3947 (1970): 733-738.
- Carpenter, C. "Sexual behavior of free ranging rhesus monkeys." *Journal of Comparative Psychology* 33.1 (1942): 113.
- Carney, J. "Landscapes of Technology Transfer: Rice Cultivation and African Continuities." *Technology and Culture* (1996): 5-35.

- Cato. *On Agriculture in Cato and Varro: On Agriculture*, rev. ed. W. Hooper, trans. Cambridge: Harvard University Press, 1934.
- Cauvin, J. Archaeological Reports from the Tabqa Dam Project Euphrates Valley, Syria. D. Freedman, ed. Annual of the American Schools of Oriental Research, no. 44, 1979.
- Cauvin, J. and M-C. Cauvin. "The Origins of Agriculture in the Levant," in *The Hilly Flanks*. C. Young, T. Smith and Mortensen, eds. Chicago: Oriental Institute of the University of Chicago, 1982.
- Champion, T., C. Gamble, S. Shennan, and A. Whittle. *Prehistoric Europe*. London: Left Coast Press, 2009.
- Chandler, A. *The Visible Hand: The Managerial Revolution in American Business*. Cambridge: Harvard University Press, 1977.
- Chen, J. "Of Agriculture's First Disobedience and Its Fruit." *Vanderbilt Law Review* 48 (1995): 1261-1287.
- Cheney, P.. *Revolutionary Commerce: Globalization and the French Monarchy*. Cambridge: Harvard University Press, 2010.
- Childe, V.-G. "Early Forms of Society," in *A History of Technology*, vol. 1. C. Singer, E. Holmyard and A. Hall, eds. Oxford: Oxford University Press, 1954.
- -----. Man Makes Himself. New York: Coronet Books, 2003 [1936].
- ----. New Light on the Most Ancient East, 4th ed. London: W.W. Norton, 1969.
- Childs, N. A Political Academy in Paris, 1724-1731: The Entresol and its Members. Oxford: Voltaire, 2000.
- Chivers, D. "Diets and Guts," in *The Cambridge Encyclopedia of Human Evolution*. S. Jones, R. Martin, and D. Pilbeam, eds. Cambridge: University of Cambridge Press, 1992.
- Chodorow, N. *The Reproduction of Mothering*. Berkeley: University of California Press, 1978.
- Cohen, G. "Institutions in Economic Analysis," in *Economics and the Historian*, T. Rawski, et al., eds. Berkeley: University of California Press, 1989.
- Cohn, N. Warrant for Genocide: The Myth of the Jewish World Conspiracy and the 'Protocol of the Elders of Zion.' London: Eyre & Spottiswoode, 1996.

- Collins, J. The Fiscal Limits of Absolutism: Direct Taxation in Early Seventeenth Century France. Berkeley: University of California Press, 1988.
- Contamine, P. War in the Middle Ages. New York: Blackwell, 1984.
- Christin, R. "Possession," in *The Weight of the World*. P. Bourdieu, ed. Cambridge: Harvard University Press, 2000.
- Cipolla, C. Before the Industrial Revolution: European Society and Economy, 1000-1700. 2nd ed. London: XX, 1980.
- -----. The Economic History of World Population. New York: Penguin, 1962.
- Claiborne, R. Climate, Man, and History. New York: Norton, 1970.
- Clark, H. Compass of Society: Commerce and Absolutism in Old-Regime France. Lanham: Lexington, 2007.
- Clark, J. "Marine Insurance in Eighteenth-Century La Rochelle." *French Historical Studies* 10.4 (1978): 577-599.
- Clarke, A. *The Struggle for the Breeches: Gender and the Making of the British Working Class.* Berkeley: University of California Press, 1995.
- Clastres, *Society Against the State: Essays in Political Anthropology*. R. Hurley, trans. New York, Zone, 1987.
- Clutton-Brock, T. "Some Aspects of Intraspecific Variation in Feeding and Ranging Behavior in Primates," in *Primate Ecology: Studies in Feeding and Ranging Behavior*. T. Clutton-Brock, ed. New York: Academic Press, 1977.
- Cochrane, W. *The Development of American Agriculture: A Historical Analysis*, 2nd ed. Minneapolis: University of Minnesota Press, 1993.
- Cohen, M. The Food Crisis in Prehistory. New Haven: Yale University Press, 1977.
- Cohen, W. "Negro Involuntary Servitude in the South, 1865-1940," *Journal of Southern History* 42 (1976): 31-60.
- Cole, S. *The Neolithic Revolution*. London: Trustees of the British Museum, 1967.
- Coleman, W. "Providence, Capitalism and Environmental Degradation: English Apologetics in an Era of Economic Revolution," *Journal of the History of Ideas* 37 (1976): 27-44.

- Collingwood R. and J. Myres. *Roman Britain and the English Settlements*, 2nd ed. Oxford: Oxford University Press, 1937.
- Contenau, G. Everyday Life in Babylon and Assyria. London: W.W. Norton, 1966.
- Columella. *On Agriculture* in *Columella: On Agriculture*, 3 vols. H. Ash, trans. Cambridge: Harvard University Press, 1941.
- Cowdry, A. *This Land, This South.* Lexington: University of Kentucky Press, 1983.
- Cressy, M. Coming Over: Migration and Communication between England and New England in the Seventeenth Century. Cambridge: Cambridge University Press, 1987.
- Cronon, W. Changes in the Land: Indians, Colonists and the Ecology of New England. New York: Macmillian, 2011.
- Crosby, A. *Ecological Imperialism: The Biological Expansion of Europe, 900-1900.* New York: Cambridge University Press, 1986.
- Crumley, C. "Historical Ecology," in *Historical Ecology*. C. Crumley, ed. Santa Fe: University of New Mexico Press, 1994.
- -----. "The Ecology of Conquest: Contrasting Agropastoral and Agricultural Societies' Adaptation to Climatic Change," in C. Crumley, ed. Santa Fe: University of New Mexico Press, 1994.
- Cunningham A. and N. Jardine, eds. *Romanticism and the Sciences*. Cambridge: Cambridge University Press, 1990.
- Currie, T., S. Greenhill et al., "Rise and fall of political complexity in island South-East Asia and the Pacific." *Nature* 467 (2010): 801-804.
- Curtis, Jr., A. "Memoirs of His Life and Work with Dr. George Washington Carver and Henry Ford," interview by D. Glick and D. Bakken, July 23, 1979, Archives of the Henry Ford Museum, 11-22.
- Dalby, A. Cato: On Farming. New York: Oxford University Press, 1998.
- Daly, J. When Slavery Was Called Freedom. Lexington: University of Kentucky Press, 2002.
- Daly, M. and M. Wilson. *Homicide*. New York: Transaction Publishers, 1988.
- Daniels, P. Breaking the Land: The Transformation of Cotton, Tobacco and Rice Cultures Since 1880. Urbana: University of Illinois Press, 1985.

- Dansgaard, W., S. Johnsen, H. Clausen, *et al.* "Evidence for General Instability of Past Climate from a 250-kyr Ice-core Record." *Nature* 364 (1993): 218-220.
- Dart, R. "Australopithecus africanus: the Man-Ape of South Africa." Nature 115 (1925): 195-199.
- Daughterty, C. "The Development of Horse-Power Equipment in the U.S." PhD diss., University of Pennsylvania, 1927.
- David, P. *Technical Choice, Innovation and Economic Growth.* Cambridge: Cambridge University Press, 1975.
- Davies, C. Peace, Print and Protestantism, 1450-1558. London: Hart-Davis, 1977.
- -----. "Slavery and Protector Somerset: The Vagrancy Act of 1547," *Economic History Review* 2nd ser., 193 (1966): 533-549.
- Davis, D. *The Problem of Slavery in Western Culture*. Oxford: Oxford University Press, 1966.
- Davis, E. *Scripture, Culture, Agriculture: An Agrarian Reading of the Bible.* Cambridge: Cambridge University Press, 2009.
- Davis, K. *The North Atlantic World in the Seventeenth Century*. Minneapolis: University of Minnesota, 1974.
- Davis, K. *The Holocaust and the Henmaid's Tail: A Case for Comparing Atrocities*. New York: Lantern Books, 2005.
- Davis, S. "Climatic change and the advent of domestication." *Paléorient* 8.2 (1982): 5-15.
- Darwin, C. *The Descent of Man, and Selection in Relation to Sex*, in *From So Simple a Beginning*. E. Wilson, ed. New York: Penguin, 2006 [1871].
- Dawkins, R. *The Selfish Gene*. Oxford: Oxford University Press, 1976.
- de Beauvoir, S. *The Second Sex*. New York: Vintage, 1973 [1951].
- de Noëttes, L. *La force motrice animale à travers les âges*, reprinted as *L'attelege*, 2 vols. Paris: Berger-Levrault, 1931 [1924].
- de Ste Croix, G. The Class Struggle in the Ancient Greek World: From the Archaic Age to the Arab Conquest. Ithaca: Cornell University Press, 1989.

- de Tocqueville, A. *Democracy in America*. H. Mansfield and D. Winthrop, eds. Chicago: University of Chicago Press, 2012.
- Dear, P. Revolutionizing the Sciences: European Knowledge and its Ambitions, 1500-1700. Princeton: Princeton University Press, 2001
- Degler, C. *Place over Time: The Continuity of Southern Distinctiveness*. Athens: Taylor and Francis, 1997.
- Demosthenes. Phillippics, Olynthiacs, Minor Public Orations. C. Vince and J. Vince, trans. Cambridge: Harvard University Press, 1930.
- Dencecco, M. "Fragmented Authority on the European Continent, 1700-1815." *Social Science Research Network Working Papers* (2008): 14-26.
- Derrida, J. *Of Grammatology*, rev. ed., G. Spivak, trans. Baltimore: The Johns Hopkins University Press, 1997 [1974].
- -----. *The Animal That Therefore I Am.* M.-L. Mallet, ed., D. Wills, trans. New York: Columbia University Press, 2008.
- -----. *The Beast and the Sovereign*, vol. 1. G. Bennington, trans. Chicago: University of Chicago Press, 2009.
- Devisse, J. The Image of the Black in Western Art, vol. 2, From the Demonic Threat to the Incarnation of Sainthood. Cambridge: Harvard University Press, 1979.
- Diamond, J. Guns, Germs, and Steel. New York: Knopf, 1997.
- Diamond, J. "Evolution, Consequences and Future of Plant and Animal Domestication." *Nature* 418 (2002): 700-707.
- ----- "The Worst Mistake in the History of the Human Race," in *Applying Cultural Anthropology*. A. Podolefsky and P. Brown, eds. Mountain View: McGraw-Hill, 1991.
- Diamond, S. Primitive Views of the World. New York: Columbia University Press, 1964.
- -----. *In Search of the Primitive: A Critique of Civilization.* New Brunswick: Transaction, 1974.
- Diósdi, G. Ownership in Ancient and Preclassical Roman Law. Budapest: Akadémiai Kiadó, 1970.
- Domar, E. "The Causes of Slavery or Serfdom: A Hypothesis." *Journal of Economic History* 30.1 (1970): 18-32.

- Drescher, S. Capitalism and Anti-Slavery: British Mobilization in Comparative Perspective. Oxford: Oxford University Press, 1987.
- Driver, G. and J. Miles. *The Babylonian Laws*, 2 vols. Oxford: Oxford University Press, 1955.
- duBois, P. Sowing the Body: Psychoanalysis and Ancient Representations of Women. Chicago: University of Chicago Press, 1988.
- Dubreuil, B. *Human Evolution and the Origin of Hierarchies: The State of Nature*. Cambridge: Cambridge University Press, 2010.
- Duby, G. Rural Economy and Country Life in the Medieval West. C. Postan, trans. Philadelphia: University of Pennsylvania Press, 1998.
- -----. The Early Growth of the European Economy: Warriors and Peasants from the Seventh to the Twelfth Century. Ithaca: Cornell University Press, 1974.
- -----. *The Three Orders: Feudal Society Imagined*, A. Goldhammer, trans. Chicago: University of Chicago Press,1980.
- Ducos, P. "The earliest domesticated animals in the Near East," in *The domestication and exploitation of plants and animals*. P. Ucko and G. Dimbleby, eds. Chicago: Aldine, 1969.
- Dunn, C. "Servants and Slaves: The Recruitment and Employment of Labor." *Colonial British America: Essays in the New History of the Early Modern Era*. Baltimore, Johns Hopkins University Press, 1984.
- Durham, W. "Toward a Coevolutionary View of Human Biology and Culture," in *The Sociobiology Debate: Readings on Ethical and Scientific Issues*. A. Caplan, ed. New York: Harper & Row, 1978.
- Earle, C. *Geographical Inquiry and American Historical Problems*. Stanford: Stanford University Press, 1992.
- Eckholm, K. and J. Friedman. "Capital' Imperialism and Exploitation in Ancient World-Systems." *Review* 4 (1982): 87-109.
- Edens, C. "Dynamics of Trade in the Ancient Mesopotamian 'World System'." *American Anthropologist* 94.1 (1992).
- Edwards, M., et. al. Apologetics in the Roman Empire: On Pagans, Jews, and Christians. Oxford: Oxford University Press, 1999.

- Eglash, R. "Broken Metaphor: The Master-Slave Analogy in Technical Literature." *Technology and Culture* 28.2 (2007): 360-369.
- Elmer, J. "Torture and Hyperbole." Law, Culture and the Humanities 3.1 (2007): 18-34.
- Ellickson, R. and C. Thorland. "Ancient Land Law." *Chicago-Kent Law Review* 71 (1995): 321-331.
- Ellison, R. *Invisible Man.* London: Penguin, 1987 [1952].
- Ellison, T. The Cotton Trade of Great Britain. New York: Viking, 1968 [1886].
- Elsner, H. *The Technocrats: Prophets of Automation*. Syracuse: Syracuse University Press, 1967.
- Ember, C. "Myths about Hunter-Gatherers." Ethnology 17.4 (1978): 439-448.
- Engels, F. *The Origin of the Family, Private Property and the State*. New York: Penguin Press, 2010 [1884].
- Engerman, S. "Some considerations relating to property rights in man." *Journal of Economic History* 33 (1973): 43-65.
- Ennen, E. *The Medieval Town*. Berkeley: University of California Press, 1979.
- Erdal D. and A. Whiten. "On Human Egalitarianism." *Current Anthropology* 35.2 (1994): 175-183.
- Ernle, R. English Farming Past and Present. London: Longmans & Green, 1912.
- Erikson, E. "Early Development of Female Sexuality." *International Journal of Psycho-Analysis* 8 (1927): 459-472.
- Esposito, R. *Bios: Biopolitics and Philosophy*. T. Campbell, trans. Minneapolis: University of Minnesota Press, 2008.
- Eyre, C. "The Agricultural Cycle, Farming, and Water Management in the Ancient Near East." *Civilizations of the Ancient Near East* 1 (1995): 175-190.
- ----- "The Water Regime for Orchards and Plantations in Pharaonic Egypt." *Journal of Egyptian Archaeology* 79 (1994): 57-80.
- Faris, J. "From Form to Content in the Structural Study of Aesthetic Systems," in D. Washburn, ed. *Structure and Cognition in Art*. Cambridge: Cambridge University Press, 1983.

- Fawtier, J. The Capetian Kings of France, 987-1328. Hambledon: Continuum, 2007.
- Feigin, S. "The Captive in Cuneiform Inscriptions." *American Journal of Semitic Languages and Literatures* 50:4 (1934): 229-230.
- Ferguson, A. Clio Unbound: Perception of the Social and Cultural Past in Renaissance England. Durham: Duke University Press, 1979.
- -----. *Utter Antiquity: Perceptions of Prehistory in Renaissance England* Durham: Duke University Press, 1993.
- Fesler, J. "French Field Administration: The Beginnings," *Comparative Studies in Society and History* 5 (1962): 76-111.
- Fideler, P. "Poverty, Policy and Providence: the Tudors and the Poor," in *Political Thought and the Tudor Commonwealth: Deep Structure, Discourse and Disguise.* P. Fideler and T. Mayer, eds. New York: Routledge, 1992.
- Finlay, M. "The German Agricultural Experiment Station and the Beginnings of American Agricultural Research." *Agricultural History* 62 (1988): 41-50.
- Finley, M. Ancient Slavery and Modern Ideology. B. Shaw, ed. New York: Markus Weiner, 1998.
- ----- "Between Slavery and Freedom." *Comparative Studies in Society and History* 6 (1964): 233-249.
- ----- *Economy and Society in Ancient Greece*. Berkeley: University of California Press, 1999.
- -----. *The Ancient Economy*. Berkeley: University of California Press, 1973.
- -----. The World of Odysseus. New York: New York Review of Books, 1954.
- ----- "Was Greek Civilization Based on Slave Labor?," in M. Finley, ed. *Slavery in Classical Antiquity*. Cambridge: Cambridge University Press, 1960.
- Finley, M. and D. Smith. Ancient Sicily, rev. ed. London: Chatto & Windus, 1970.
- Fishbane, M. Biblical Text and Texture. Oxford: Oxford University Press, 2003 [1979].
- Fisher, E. Woman's Creation, Sexual Evolution and the Shaping of Society. Garden City: Anchor Press, 1979.
- Fite, G. Cotton Fields No More: Southern Agriculture, 1865-1980. Lexington: University of Kentucky Press, 1984.

- Fitzgerald, D. *Every Farm a Factory: The Industrial Ideal in American Agriculture*. New Haven: Yale University Press, 2003.
- Flannery, K. "Origins and Ecological Effects of Early Domestication in Iran and the Near East," in *The Domestication and Exploitation of Plants and Animals*. P. Ucko and G. Dimbleby, eds. Chicago: Aldine, 2007.
- -----. "The Origins of Agriculture." *Annual Review of Anthropology* 2 (1973): 271-310.
- Flannery, K. and J. Marcus. *The Creation of Inequality: How Our Prehistoric Ancestors Set the Stage for Monarchy, Slavery, and Empire*. Cambridge: Harvard University Press, 2012.
- Fleisig, H. "Slavery, the Supply of Agricultural Labor, and the Industrialization of the South," *Journal of Economic History* 36 (1976): 573-574.
- Flesher, P. Oxen, Women, or Citizens?: Slaves in the System of the Mishnah. Atlanta: Scholars Press, 1988.
- Flight, J. "The Nomadic Ideal in the Old Testament," *Journal of Biblical Literature* 42 (1923), 213-226.
- Fogel, R. Without Consent or Contract: The Rise and Fall of American Slavery. New York: W.W. Norton & Company, 1994.
- Foley, R. "Hominids, Humans and Hunter-Gatherers," in *Hunters and Gatherers*, vol. 1, *History, Evolution and Social Change*. T. Ingold, D. Riches, and J. Woodburn, eds. Oxford: Oxford University Press, 1988.
- Foley, R. and C. Gamble. "The ecology of social transitions in human evolution." *Philosophical Transactions of the Royal Society Series B: Biological Sciences* 364 (2009): 3267-3279.
- Follett, R. *The Sugar Masters: Planters and Slaves in Louisiana's Cane, 1820-1860.*Baton Rouge: Louisiana State University Press, 2005.
- Foner, E. *Politics and Ideology in the Age of the Civil War*. New York: Oxford University Press, 1980.
- Foner, E. *Reconstruction: America's Unfinished Revolution, 1863-1877.* New York: Harper and Row, 1988.
- Foucault, M. History of Sexuality: The Uses of Pleasure. London: Harmondsworth, 1986.

- ----- "Power Affects the Body," in *Foucault Live: Interviews, 1961-84*. S. Lotringer, ed. New York: Semiotext(e), 1996.
- -----. Security, Territory, Population: Lectures at the College de France 1977-1978. M. Senellart, F. Ewald, A. Fontana, A. Davidson, eds., B. Burchell, trans. New York: Picador, 2009.
- -----. Society Must Be Defended: Lectures at the College de France, 1975-1976. D. Macey, trans. New York: Picador, 2003.
- -----. *The Order of Things: An Archeology of the Human Sciences*. New York: Vintage, 2002.
- Fox-Genovese, E. and E. Genovese. *The Mind of the Master Class*. New York: National Humanities Center, 1985.
- Francis, E. "The Personality Type of the Peasant According to Hesiod's *Works and Days*: A Culture Case Study," *Rural Sociology* 10 (1945): 275-295.
- Frank, A.-G. "Transitional Ideological Modes." *Critique of Anthropology* 11 (1991): 171-188.
- Frankfort, H. and H. Frankfort. "Myth and Reality," in H. Frankfort, J. Wilson, T. Jacobsen, W. Irwin. *The Intellectual Adventure of Ancient Man: An Essay of Speculative Thought in the Ancient Near East*. Chicago: University of Chicago Press, 1977.
- Frankfort, H., J. Wilson, and T. Jacobsen. *Before Philosophy*. Baltimore: Johns Hopkins University Press, 1961.
- Franklin, J. ed. Constitutionalism and Resistance in the Sixteenth Century: Three Treatises by Hotman, Beza, and Mornay. New York: Pegasus, 1969.
- ----- *Jean Bodin and the Rise of Absolutist Theory*. Cambridge: Cambridge University Press, 1973.
- ------ "Sovereignty and the Mixed Constitution: Bodin and his Critics," in *Cambridge History of Political Thought, 1450-1700.* Cambridge: Cambridge University Press, 1991.
- Fraser E. and A. Rimas. *Empires of Food*. New York: Counterpoint, 2010.
- Frayn, J. Subsistence Farming in Roman Italy London: Centaur Press, 1979.
- Freidman, J. "Concretizing the continuity argument in global systems analysis," in World

System History: The Social Science of Long-Term Chance. R. Denemark, J. Friedman, B. Gills, G. Modelski, eds. London: Routledge, 2000. ----- "Cultural Conflicts in Medieval World Maps," in S. Schwartz, ed., *Implicit Understandings: Observing, Reporting and Reflecting on the Encounters between* Europeans and Other Peoples in the Early Modern Era. Cambridge: Cambridge University Press, 1994. -----. The Monstrous Races in Medieval Art and Thought. Syracuse: Syracuse University Press, 2000. Freud, S. "Female Sexuality", in *The Standard Edition of the Complete Psychological* Works of Sigmund Freud, vol. 21. London: Hogarth, 1964 [1931]. -----. Civilization and Its Discontents. J. Strachey, trans. New York: W.W. Norton, 2010. Fried, M. "On the Evolution of Social Stratification and the State," in S. Diamond, ed., Culture and History. New York: Octagon Press, 1960. -----. The Notion of Tribe. New York: Benjamin Cummings Publishing, 1975. -----. The Evolution of Political Society: An Essay in Political Anthropology. New York: Random House, 1967. Friedl, E. Women and Men. New York: Waveland Press, Inc., 1975. Friedlander, H. Origins of Nazi Genocide: From Euthanasia to the Final Solution. Chapel Hill: University of North Carolina Press, 1997. Fromm, E. *The Heart of Man*. New York: Harper & Row, 1964. Fryde, E. Peasants and Landlords in Later Medieval England, c. 1380 – c. 1525. New York: Alan Sutton, 1996. Fuhrmann, H. Germany in the High Middle Ages, c. 1050-1200. Cambridge: Cambridge University Press, 1986. Fulbrook, M. and T. Skocpol, "Destined Pathways: The Historical Sociology of Perry Anderson," in Vision and Method in Historical Sociology. T. Skocpol, ed. Cambridge: Cambridge University Press, 1984. Fussell, G. Classical Tradition in Western Farming. Rutherford: Fairleigh Dickson University Press, 1972.

----- Crop Nutrition: Science and Practice before Liebig. Lawrence: University of

- Kansas Press, 1971.
- ----. The Old English Farming Books: From Fitzherbert to Tull, 1523-1730. London: Allen and Unwin, 1947.
- Garnsey, P. Famine and Food Supply in the Graeco-Roman World: Response to Risk and Crisis. Cambridge: Cambridge University Press, 1989.
- -----. *Ideas of Slavery from Aristotle to Augustine*. Cambridge: Cambridge University Press, 1996.
- Garnsey, P. and M. Rathbone. "The Background to the Grain Law of Gaius Gracchus," *Journal of Roman Studies* 75 (1985): 20-43.
- Geist, V. Mountain Sheep. Chicago: University of Chicago Press, 1971.
- Gelb, I. "Prisoners of War in Early Mesopotamia." *Journal of Near Eastern Studies* 32 (1973): 70-98.
- Gernet, L. *The Anthropology of Ancient Greece*. Baltimore: John Hopkins University Press, 1981.
- Genovese, E. Roll, Jordon, Roll: The World the Slaves Made. New York: Vintage, 1976.
- Gilman, A. "The development of social stratification in bronze age Europe." *Current Anthropology* 22 (1981): 1-8.
- Gimbutas, M. *Goddesses and Gods of Old Europe*. Berkeley: University of California Press, 1982.
- Given, J. State and Society in Medieval Europe. Ithaca: Cornell University Press, 1990.
- Glacken, C. *Traces on the Rhodesian Shore*. Berkeley: University of California Press, 1967.
- Glubok, S., ed. *Discovering the Royal Tombs at Ur.* London: Macmillian, 1969.
- Goldenberg, D. *The Curse of Ham: Race and Slavery in Early Judaism, Christianity and Islam.* Princeton: Princeton University Press, 2009.
- Goldin, C. and K. Sokoloff. "The Relative Productivity Hypothesis of Industrialization: The American Case." *Quarterly Journal of Economics* (1984): 473-499.
- Goldstone, J. *Revolution and Rebellion in the Early Modern World*. Berkeley: University of California Press, 1991.

- Goodman, D. *The Republic of Latters: A Cultural History of the French Enlightenment*. Ithaca: Cornell University Press, 1994.
- Goodman, D., B. Sorj, and J. Wilkinson, From Farming to Biotechnology: A Theory of Agroindustrial Development. Oxford: Blackwell, 1987.
- Goodman, M. *State and Society in Roman Galilee, AD 132-212*. Ph.D. dissertation. University of Oxford, 1980.
- Goody, J. "Slavery in Time and Space," in *Asian and African Systems of Slavery*, J. Watson, ed. Berkeley: University of California Press, 1980.
- Goren-Inbar, N., N. Alperson, M. Kislev, *et. al.* "Evidence of Hominin Control of Fire at Gesher Benot Ya 'aqov, Israel." *Science* 30 (April 2004): 725-727.
- Gosden C. and J. Hather, eds. *The Prehistory of Food*. New York: Routledge, 2004.
- Gottlieb, R. Forcing the Spring: The Transformation of the American Environmental Movement. Washington, D.C.: Island Press, 2005.
- Graeber, D. Possibilities: Essays in Hierarchy and Desire. Oakland: AK Press, 2007.
- Grantham, G. "Agricultural Supply During the Industrial Revolution." *Journal of Economic History* 49 (March 1989): 43-72.
- Graves, R. *The White Goddess: A Historical Grammar of Poetic Myth.* New York: McMillian, 2013.
- Gray, L. and E. Thompson. *History of Agriculture in the Southern United States to 1860*, 2 vols. Washington, D.C.: USPGO, 1933.
- Greenidge, C. Slavery. London: Allen and Unwin, 1958.
- Griffin, M. Seneca: A Philosopher in Politics. Oxford: Oxford University Press, 1976.
- Grousset, R. *The Empire of the Steppes: A History of Central Asia*. N. Walford, trans. New Brunswick: Rutgers University Press, 1970 [1939].
- Grove, R. Green Imperialism: Colonial Expansion, Tropical Edens and the Origins of Environmentalism 1600-1860. Cambridge: Cambridge University Press, 1995.
- Guilaine, J. and J. Zammit. *The Origins of War: Violence in Prehistory*. M. Hersey, trans. Oxford: Oxford University Press, 1991.
- Gunst, P. and L. Gaál. *Animal Husbandry in Hungary in the 19th-20th Centuries*. Budapest: Akadémiai Kiadó, 1977.

- Gurven, M. "To give and to give not." *Behavioral and Brain Sciences* 27 (2004): 543-583.
- Gurven M. and K. Hill. "Why do men hunt?" Current Anthropology 50.1 (2009): 51-74.
- Gutman, Y. and M. Berenbaum, eds., *Anatomy of the Auschwitz Death Camp*. Bloomington: Indiana University Press, 1994.
- Habermas, J. *The Structural Transformation of the Public Sphere*. Cambridge: MIT Press, 1989.
- Hahn, S. A Nation Under Our Feet: Black Political Struggles in the Rural South from Slavery to the Great Migration. Cambridge: Harvard University Press, 2003.
- Halerpin, D. Before Pastoral. New Haven: Yale University Press, 1983.
- Hallam, E. and J. Everard. Capetian France, 987-1328. London: Routledge, 2014.
- Hallo, W. "The Women of Sumer," in D. Schmandt-Besserat, ed. *The Legacy of Sumer: Invited Lectures on the Middle East at the University of Texas*. Austin: Undena, 1976.
- Hallo, W. and W. Simpson, *The Ancient Near East*. New York: Harcourt Brace Jovanovich, 1971.
- Halstead, P. "Agriculture in the Bronze Age Aegean," in B. Wells, ed., *Agriculture in Ancient Greece: Proceedings of the Seventh International Symposium*.

 Stockholm: Swedish Institute of Athens, 1992.
- ----- "Quantifying Sumerian Agriculture." *Bulletin on Sumerian Agriculture* 5 (1990): 187-195.
- -----. "The Mycenaean Palatial Economy." *Proceedings of the Cambridge Philological Society* 38 (1992): 57-86.
- ----- "Traditional and Ancient Rural Economy in Mediterranean Europe." *Journal of Hellenic Studies* 107 (1987): 77-87.
- Hamilton, N. "Feeding our Future." Nebraska Law Review 72.210 (1993): 225-240.
- Hamilton, W. "Omnivorous Primate Diets and Human Over-consumption of Meat," in *Food and Evolution: Toward a Theory of Human Food Habits*. Philadelphia: Temple University Press, 2009.
- Hamilton, W. and C. Busse. "Primate Carnivory and Its Significance to Human Diets."

- Bioscience 28 (1978): 761-766.
- Hanes, C. "Turnover Cost and the Distribution of Slave Labor in Anglo-America." *Journal of Economic History* 56 (1996): 307-329.
- Hanson, V. The Other Greeks: The Family Farm and the Agrarian Roots of Western Civilization. Berkeley: University of California Press, 1999.
- Harrington, J. *The Commonwealth of Oceana and A System of Politics*. Cambridge: Cambridge University Press, 1992 [1651].
- Harris, D. "Human Diet and Subsistence," in *The Cambridge Encyclopedia of Human Evolution*, S. Jones, R. Martin, and D. Pilbeam, eds. Cambridge: University of Cambridge Press, 1992.
- Harris, M. Cannibals and Kings: The Origins of Cultures. New York: Vintage, 1991.
- -----. "Why Men Dominate Women," *Columbia* (1978): 9-39.
- Harris, R. "Notes on the Slave Names of Old Babylonian Sippar." *Journal of Cuneiform Studies* 29.1 (1977): 46-52.
- Hartman, S. Scenes of Subjection: Terror, Slavery, and Self-Making in Nineteenth Century America. New York: Oxford University Press, 1997.
- Harvey, D. A Brief History of Neoliberalism. Oxford: Oxford University Press, 2009.
- Harvey, F. "Herodotus and the man-footed creature," in L. Archer, ed., *Slavery and Other Forms of Unfree Labor*. London: Routledge, 1988.
- Hastorf, C. *Agriculture and the Onset of Political Inequality Before the Inka*. Cambridge: Cambridge University Press, 1993.
- Hatch, N. *Democratization of Early Christianity*. New Haven: Yale University Press, 1989.
- Hawkes, C. "The Roman Villa and the Heavy Plow." Antiquity IX (1935): 339-341.
- Hawkes, I. "Grandmothers and the evolution of human longevity," *American Journal of Human Biology*, 15:3 (2003): 380-400.
- Hawkes, J. "The ecological background of plant domestication," in *The domestication and Exploitation of Plants and Animals*. P. Ucko and G. Dimbleby, eds. Chicago: Aldine, 1969.
- Hawkes, K. and R. Bird. "Showing off, handicap signaling, and the evolution of men's

- work." Evolutionary Anthropology 11:1 (2002): 58-67.
- Hayden, B. "A New Overview of Domestication," in Price and Gebauer, eds., Last Hunters, First Farmers: New Perspectives on the Prehistoric Transition to Agriculture. Santa Fe: School of American Research Press, 1995.
- ----- "Fabulous Feasts," in *Feasts: Archaeological and Ethnographic Perspectives* on *Food, Politics and Power*. M. Dietler and B. Hayden, eds. Birmingham: University of Alabama Press, 2010.
- -----. "Models of Domestication," in A. Gebauer and T. Price, eds., *Transitions to Agriculture in Prehistory*. Madison: University of Wisconsin Press, 1992.
- ----- "Nimrods, Piscators, Pluckers and Planters." *Journal of Anthropological Archaeology* 9 (1990): 31-69.
- ----- "Pathways to Power," in *Foundations of Social Inequality*, T. Price and G. Feinman, eds. New York: Springer, 1995.
- ----- "Research and Development in the Stone Age." *Current Anthropology* 22 (1981): 519-548.
- Hays, S. Beauty, Health, and Permanence. Cambridge: Harvard University Press, 1993.
- Hazony, Y. *Philosophy of the Hebrew Scripture*. Cambridge: Cambridge University Press, 2012.
- ----- "The Jewish Origins of the Western Disobedience Tradition." *Azure* (1998): 17-74.
- Heer, F. *The Medieval World: Europe 1100-1350*. London: Weidenfeld and Nicolson, 1962.
- Heitland, W. Agricola: A Study of Agriculture and Rustic Life in the Graeco-Roman World. Cambridge: Cambridge University Press, 1921.
- Helms, D. "Soil and Southern History." Agricultural History 74 (2000): 734-766.
- Henley, N., ed. *Body Politics*. New York: Springer-Verlag, 1977.
- Henry, D. From Foraging to Agriculture: The Levant at the End of the Ice Age. Philadelphia: University of Pennsylvania Press, 1989.
- Henslin, J. and M. Briggs. "The Sociology of the Vaginal Examination," in J. Henslin and N. Henley, eds. *Body Politics: Power, Sex and Nonverbal Communication*. New York: Springer-Verlag, 1991.

- Herbst, J. *The German Historical School in American Scholarship*. Ithaca: Cornell University Press, 1965.
- Hersey, M. "The Transformation of George Washington Carver's Environmental Vision, 1896-1918," in *Land and Power: Sustainable Agriculture and African Americans*. J. Jordon, E. Pennick, W. Hill and R. Zabawa, eds. Waldorf: SARE, 2009.
- Hesiod. *Theogeny, Works and Days, Shield.* A. Athanassakis, trans. Baltimore: Johns Hopkins University Press, 2004.
- Hilbert, A. "The Origins of the Medieval Town Patriciate," *Past and Present* 3 (1953):11-37.
- Hill, C. *Winstanley: The Law of Freedom and Other Writings*. Cambridge University Press, 2006.
- Hill, K. and H. Kaplan. "On Why Male Foragers Hunt and Share Food." *Current Anthropology* 34 (1994): 701-706.
- Hillel, D. Out of the Earth. Berkeley: University of California Press, 1991.
- Hilton, R., ed. Class Conflict and The Crisis of Feudalism. London: Bloomsbury, 1990.
- -----. The Decline of Serfdom in Medieval England: Essays in Medieval Social History. London: Bloomsbury, 1985.
- -----. *English and French Towns: A Comparative Study*. Cambridge: Cambridge University Press, 1995.
- Hodder, I. *The Domestication of Europe*. Oxford: Blackwell, 1990.
- Hodin, S. "The Mechanisms of Monticello: Saving Labor in Jefferson's America," *Journal of the Early Republic* 26.3 (2006): 377-418.
- Hoffman, P. *Growth in a Traditional Society*. Princeton: Princeton University Press, 1996.
- -----. "Land Rents and Agricultural Productivity: The Paris Basin, 1450-1789," Journal of Economic History 51 (1991): 771-805.
- Hole, H. "A reassessment of the Neolithic revolution." *Paléorient* 10:2 (1979): 49-60.
- Hole, P. "The context of caprine domestication in the Zagros region," in *The Origins and Spread of Agriculture and Pastoralism in Eurasia*. D. Harris, ed. London: British Archeology Institute, 1996.

- Holley, D. *The Second Great Emancipation: The Mechanical Cotton Picker, Black Migration, and How They Shaped the Modern South.* Fayetteville: University of Arkansas Press, 2000.
- Holloway, L. and C. Morris. "Contesting Genetic Knowledge-Practices in Livestock Breeding." *Environment and Planning* 10: *Society and Space* 30:1 (2012).
- Hont, I. Jealousy of Trade: International Competition and the Nation-State in Historical Perspective. Cambridge: Harvard University Press, 2005.
- Homer. The Odyssey. R. Fagels, trans. New York: Penguin Classics, 1997.
- Horowitz, L. "Temporal and Spatial Variation in Neolithic Caprine Exploitation Strategies." *Paléorient* 29.1 (2003): 19-58.
- Horowitz, M. "The Image of God in Man Is Woman Included?." *Harvard Theological Review* 72.3-4 (1979): 175-206.
- Hoskins, W. "Harvest Fluctuations and English Economic History, 1480-1619." Agricultural History Review 12 (1964): 21-35.
- Höss, R. Commandant of Auschwitz. Cleveland: Pan Books, 1959
- Hrdy, S. Mothers and Others. Cambridge: Harvard University Press, 2009.
- -----. The Woman that Never Evolved. Cambridge: Harvard University Press, 2009.
- Humphreys, S. *The Family, Women, and Death*. Ann Arbor, University of Michigan Press, 1993.
- Hurt, R. *Agriculture and Slavery in Missouri's Little Dixie*. Columbia: University of Missouri Press, 1992.
- Hussain A. and K. Tribe, "Landagitation," in German Social Democracy and the Peasantry, 1890-1907, vol. 1: Marxism and the Agrarian Question. Highlands: Oxford University Press, 1981.
- Hutchinson, W. Cyrus Hall McCormick: Harvest, 1856-1884. New York: Century, 1930.
- Hyde, A. *Bodies of Law*. Princeton: Princeton University Press, 1997.
- Inikori, J. "Slavery and the Revolution in Cotton Textile Production in England." *Social Science History* 13 (1989): 343-379.
- Innes, S. Labor in a New Land: Economy and Society in Seventeenth-Century

- Springfield. Princeton: Princeton University Press, 2014.
- Irons, W. "Nomadism as a Political Adaptation: The Case of the Yomut Turkmen." *American Ethnologist* I (1974): 635-658.
- Irwin, J. "Exploring the Affinity of Wheat and Slavery in the Virginia Piedmont." *Explorations in Economic History* 25 (1988): 295-322.
- Isaac, D. and D. Crader, "To What Extent Were Early Hominids Carnivorous?," in *Omnivorous Primates: Gathering and Hunting in Human Evolution*, R. Harding and G. Teleki, eds. New York: Columbia University Press, 1981.
- Isager S. and J. E. Skydsgaard, *Ancient Greek Agriculture: An Introduction*. London: Psychology Press, 1993.
- Jacobsen, T. "Primitive Democracy in Ancient Mesopotamia," *Journal of Near Eastern Studies*, 2.3 (1943): 159-172.
- Jacobsen, T. Toward the Image of Tammuz and Other Essays on Mesopotamian History and Culture. W. Moran, ed. Cambridge: Cambridge University Press, 1976.
- James, E. *Myth and Ritual in the Ancient Near East: An Archaeological and Documentary Study.* London: Thames and Hudson, 1958.
- -----. The Ancient Gods. New York: Phoenix Giant, 1999.
- -----. *The Cult of the Mother-Goddess*. New York: Barnes and Noble, 1994.
- James, P. "Invention and Innovation, 1619-1930," in *Technology and the African-American Experience*. B. Sinclair, ed. Cambridge: MIT Press, 2004.
- Johnson, A. and T. Earle. *The Evolution of Human Societies*. Stanford: Stanford University Press, 2000.
- Johnson, C. *Shadow of the Plantation*. New Brunswick: Rutgers University Press, 1996 [1934].
- Jolowicz, H. *Historical Introduction to the Study of Roman Law*. Cambridge: Cambridge University Press, 1952.
- Jones, A. *The Later Roman Empire, 284-602: A Social, Economic and Administrative Survey.* London: Taylor and Francis, 1986.
- Jones, J. *The Law and Legal Theory of the Greeks*. Oxford: Oxford University Press, 1956.

- Jones, P. "Parish, Seigneurie and the Community of Inhabitants in Southern Central France during the Eighteenth and Nineteenth Centuries." *Past and Present* 91 (1981): 74-108.
- Kahn-Freund, O. "Introduction to Renner," in *The Institutions of Private Law and Their Social Functions*. K. Renner, ed. London: Transaction Publishers, 1949.
- Kaplan, S. *Bread, Politics, and Political Economy in the Reign of Louis XV*, 2 vols. Ithaca: Cornell University Press, 1964.
- ------. Provisioning Paris: Merchants and Millers in the Grain and Flour Trade during the Eighteenth Century. Ithaca: Cornell University Press, 1984.
- -----. *The Bakers of Paris and the Bread Question, 1700-1775.* Durham: Duke University Press, 1996.
- Kano, T. "Male rank order and copulation rate in a unit-group of bonobos at Wamba, Zaire." *Great Ape Societies*. Cambridge: Cambridge University Press, 1996.
- Kant, I. Critique of Judgment. J. Bernard, trans. New York: Hafner, 1951.
- Kaplan, H., P. Hooper and M. Gurven, "Intergenerational Wealth Transmission and the Dynamics of Inequality in Small-Scale Societies." *Science* 326.5953 (2009): 682-688.
- Kautsky, K. "The Technical Inferiority of the Slave Economy," in *The Slave Economy: Society in the Roman Empire*. Berkeley: University of California Press, 2014.
- Kay, R. "On the Use of Anatomical Features to Infer Foraging Behavior in Extinct Primates," in *Adaptation for Foraging in Nonhuman Primates*. J. Cant and Rodman, eds. New York: Columbia University Press, 1984.
- Keller, K. "The Wheat Trade on the Upper Potomac, 1800-1860," in Koons and Hofstra, eds. *After the Backcountry*. Knoxville: University of Tennessee Press, 2000.
- Keeley, L. War Before Civilization. Oxford: Oxford University Press, 1996.
- Kehoe, D. *Economics of Agriculture on Roman Imperial Estates in North Africa*. Gottingen: Vandenhoeck & Ruprecht, 1988.
- Kelly, R. Foraging Spectrum: The Lifeways of Hunter-Gatherers. Cambridge: University of Cambridge Press, 2013.
- -----. *Warless Societies and the Origin of War*. Ann Arbor: University of Michigan Press, 2000.

- Kempf, E. Psychopathology. St. Louis: Mosby, 1921.
- Kennedy, G. Diggers, Levellers, and Agrarian Capitalism Radical Political Thought in Seventeenth Century England. Lanham: Lexington Books, 2008.
- Kennett, D., B. Winterhalder, J. Bartruff, and J. Erlandson, "An ecological model for the emergence of institutionalized social hierarchies on California's Northern Channel Islands," in S. Shennan, ed., *Pattern and Process in Social Evolution*. Berkeley: University of California Press, 2009.
- Kenyon, K. Amorites and Canaanites. London: Oxford University Press, 1966.
- Kerridge, K. *The Agricultural Revolution*. New York: Routledge, 1968.
- Khazanov, A. *Nomads and the Outside World*. Cambridge: Cambridge University Press, 1984.
- Kiernan, V. "Private Property in History," in J. Goody, J. Thirsk, and E. Thompson, eds. *Family and Inheritance*. London: Russell Sage Foundation, 1976.
- Kikawada, I. "Two Notes on Eve." Journal of Biblical Literature 19 (1972): 34.
- Kitto, H. *The Greeks*. London: Transaction Publishers, 1968.
- Klein, R. "The Archaeology of Modern Human Origins." *Evolution and Anthropology* 1 (1992): 5-14.
- Kloppenburg, R. First the Seed: The Political Economy of Plant Biotechnology. Madison: University of Wisconsin Press, 2005.
- Klose, R. *America's Crop Heritage*. Ames: University of Iowa Press, 1950.
- Knauft, B. "Violence and Sociality in Human Evolution." *Current Anthropology* 32:4 (1991): 391-428.
- Kogon, E., H. Langbein and A. Ruckerl, eds., *Nazi Mass Murder*. New Haven: Yale University Press 1993.
- Konig, D. "Community custom and common Law: Social change and the development of land law in seventeenth-century Massachusetts." *The American Journal of Legal History* (1974): 137-177.
- Kramer, S. *The Sumerians: Their History, Culture and Character.* Chicago: University of Chicago Press, 1963.
- Kramer, N. From the Tablets of Sumer. Indian Hills: Falcon Wing Press, 1956.

- Kramer, S. "Poets and Psalmists; Goddesses and Theologians," in D. Schmandt-Besserat, ed. *The First Civilization: The Legacy of Sumer*. Austin: University of Texas, 1976.
- Kristof, N. "Cleaning the Henhouse," New York Times, Sept. 1, 2010.
- Kühl, S. *The Nazi Connection: Eugenics, American Racism and German National Socialism.* New York: Oxford University Press, 2002.
- Kulik, G. "Dams, Fish, and Farmers: defense of public rights in eighteenth-century Rhode Island," in S. Hahn and J. Prude, eds. *The Countryside in the Age of Capitalist Transformation*. Chapel Hill: University of North Carolina Press, 1985.
- Kulikoff, A. *Agrarian Origins of American Capitalism*. Charlottesville: University of Virginia Press, 1992.
- -----. Tobacco and Slaves: The development of Southern cultures in the Chesapeake, 1680-1800. Chapel Hill: University of North Carolina Press, 1986.
- Kunstler, B. "The Werewolf Figure and Its Adoption Into the Greek Political Vocabulary." *Classical World* 84 (1991): 189-205.
- Lacan, J. "The Mirror Stage as Formative of the Function of the I as Revealed in Psychoanalytic Experience," in *Écrits*. B. Fink, trans. New York: W.W. Norton, 2006.
- LaCapra, *History and Its Limits: Human, Animal, Violence*. Ithaca: Cornell University Press, 2009.
- Ladurie, L. Carnival in Romans. New York: George Braziller, 1980.
- Lakwete, A. *Inventing the Cotton Gin: Myth and Machine in Antebellum America*. Baltimore: Johns Hopkins University Press, 2005.
- Lambert-Karlovsky, C. "The Economic World of Sumer," in D. Schmandt-Besserat, ed., The Legacy of Sumer: Invited Lectures on the Middle East at the University of Texas. Austin: Undena, 1976.
- Lamphere, L. "Strategies, Cooperation and Conflict in Women Domestic Groups," in *Woman, Culture and Society*. M. Rosaldo, L. Lamphere, J. Barnberger, eds. Stanford: Stanford University Press, 1974.
- Lancaster, C. and J. Lancaster, "Parental Involvement: Hominid Adaptation," in *How Humans Adapt: A Biocultural Odyssey*, D. Ortner, ed. Washington: Smithsonian Institution Press, 1983.

- Landecker, H. Culturing Life. Cambridge: Harvard University Press, 2009.
- Landmann, M. *Philosophical Anthropology*, D. Parent, trans. Philadelphia: Westminster,1974.
- Landau, M. Narratives of Human Evolution. New Haven: Yale University Press, 1991.
- Langdon, J. "The Economics of Horses and Oxen in Medieval England," *Agricultural History*, 30 (1982): 31-43.
- Laqueur, T. "Orgasm, Generation and the Politics of Reproductive Biology," in C. Gallagherand and T. Laqueur, eds. *The Making of the Modern Body*. Berkeley: University of California Press, 1987.
- Larsen, M. "Literacy and Social Complexity," in *State and Society: The Emergence and Development of Social Hierarchy and Political Centralization*. J. Gledhill, B. Bender, and M. Larsen, eds. London: Psychology Press, 1988.
- Latour, B. *We Have Never Been Modern*. C. Porter, trans. Cambridge: Harvard University Press, 1993.
- Lattimore, O. *Nomads and Commissars: Mongolia Revisited*. Oxford: Oxford University Press, 1962.
- -----. "On the Wickedness of Being Nomads," in *Studies in Frontier History:* Collected Papers, 1928-1958. London: Oxford University Press, 1962.
- -----. "The Frontier in History," in *Studies in Frontier History: Collected Papers*, 1928-1958. London: Oxford University Press, 1962.
- Lauffer, L. Die Bergwerkssklaven von Laureion. Berlin: F. Steiner, 1979 [1879].
- Leadbetter, S. *The Politics of Textiles: The Indian Cotton-Mill Industry and the Legacy of Swadeshi*, 1900-1985. New Delhi: Sage Publications, 1993.
- Leakey, R. and R. Lewin. *Origins Reconsidered: In Search of What Makes Us Human*. New York: Anchor, 1993.
- LeBlanc, S. Constant Battles: The Myth of the Peaceful, Noble Savage. New York: Macmillian, 2003.
- Lebovics, H. "The Uses of America in Locke's Second Treatise on Government." Journal of the History of Ideas 47 (1986): 567-582.
- Lee, R. Politics and History in Band Societies. Cambridge: Cambridge University Press,

1982.

- Lees, S. and G. Bates. "The Origins of Specialized Nomadism." *American Antiquity* 39 (1974): 187-193.
- Lerner, G. *The Creation of Patriarchy*. New York: Oxford University Press, 1996.
- Letter to the Editor, Colored American, February 7, 1838, *Black Abolitionist Papers*, 5 vols., C. Ripley, ed. Chapel Hill: University of North Carolina Press, 1991.
- Levenson, J. Sinai and Zion. New York: Harper One, 1985.
- Lévi-Strauss, C. *The Raw and the Cooked: Mythologiques, vol. 1, J.* and D. Weightman, trans. Chicago: University of Chicago Press, 1969 [1964].
- -----. *Tristes Tropiques*, J. and D. Weightman, trans. New York: Jonathan Cape, 1992 [1973].
- Levy, D. *How the Dismal Science Got Its Name*. Ann Arbor: University of Michigan Press, 2001.
- Levy, T. "The emergence of specialized pastoralism in the southern Levant," *World Archaeology* 15 (1983):15-36.
- Lewis, D. *The Public Image of Henry Ford: An American Folk Hero and His Company*. Detroit: Wayne State University Press, 1976.
- Lewontin R. and R. Levins, *The Dialectical Biologist*. Cambridge: Harvard University Press 1985.
- Lifton, R. *The Nazi Doctors and the Nuremberg Code: Human Rights in Human Experimentation*. New York: Oxford University Press, 1992.
- Liger, L. La Nouvelle Maison Rustique, 2 vols. Paris: Chez Saugrain Pere, 1763 [1721].
- Lindenfeld, D. *The Practical Imagination*. Chicago: University of Chicago Press, 1997.
- Lindberg, D. *The Beginnings of Western Science*. Chicago: Chicago University Press, 2007.
- Lindsay, J. Blast Power and Ballistics: Concepts of Force and Energy in the Ancient World. New York: Barnes and Noble, 1974.
- Litwack, L. Been in the Storm So Long: The Aftermath of Slavery. New York: Vintage, 1980.

- -----. *North of Slavery: The Negro in the Free States.* Chicago: University of Chicago Press, 2009.
- Locke, J. Second Treatise of Government. C. Macpherson, ed. Indianapolis: Hackett, 1980.
- Lodge, E. "The Communal Movement, Especially in France," in Tanner (ed.), *The Cambridge Medieval History*, vol. 5 (1957): 629-656.
- Logan, F. "India Britain's Substitute for American Cotton, 1861-65." *Journal of Southern History* 24 (1958): 472-480.
- ----- "India's Loss of the British Cotton Market After 1856." *Journal of Southern History* 31 (1965): 40-50.
- Lombard M. and L. Phillipson. "Indications of bow and stone-tipped arrow use 64,000 years ago in KwaZulu-Natal, South Africa." *Antiquity* 84 (2010): 635-648.
- Lorenz, K. On Aggression. New York: Harcourt, Brace & World, 1966.
- Loria, A. Les Bases Économiques de la Constitution Sociale. Paris, F. Alcan, 1893.
- Lovejoy, A. and G. Boas, *Primitivism and Related Ideas in Antiquity*. Baltimore: Johns Hopkins University Press, 1997.
- Lowry, T. "The Agricultural Foundation of the English Oeconomy" in *Oeconomies in the Age of Newton*. Durham: Duke University Press, 2003.
- Lukas, J. Budapest 1900: A Historical Portrait of a City and Its Culture. New York: Grove Press, 1988.
- MacDowell, D. The Law in Classical Athens. Ithaca: Cornell University Press, 1978.
- Macfarlane, A. *The Origins of English Individualism*. Cambridge: Cambridge University Press, 1994.
- MacKinnon, C. *Neo-Liberal Genetics*. Chicago: Prickly Paradigm Press, 2005.
- Maekawa, K. "The Development of the É-MÍ in Lagash during the Early Dynastic III," *Mesopotamia* 8-9 (1973-74): 89-110.
- Magdol, E. *A Right to the Land: Essays on the Freedmen's Community*. Westport: Greenwood Publishing Group, 1977.
- Mann, S. "The Rise of Wage Labor in the Cotton South: A Global Analysis," *Journal of Peasant Studies* 14 (1987): 226-242.

- Manning, R. *Against the Grain: How Agriculture Hijacked Civilization*. New York: North Point Press, 2004.
- Marcus, A. *Agricultural Science and the Quest for Legitimacy*. Ames: University of Iowa Press, 1985.
- Markley, H. "Newton, Corruption, and the Tradition of Universal History," in *Newton and Religion: Context, Nature and Influence* R. Popkin, ed. London: Springer, 1999.
- Markoff, J. "Violence, Emancipation and Democracy: The Countryside and the French Revolution." *American Historical Review* (1995) 100: 2-23.
- Marlowe, F. "Hunter-gatherers and human evolution," *Evolutionary Anthropology* 14 (2005): 54-67.
- Marshall, J. *John Locke: Resistance, Religion and Responsibility.* Cambridge: Cambridge University Press, 1994.
- Martin and Voorhies, Female of the Species. Ithaca: Cornell University Press, 1975.
- Marx, K. Capital, vol. 1., B. Fowkes, trans. New York: Vintage, 1992 [1867].
- -----. The Poverty of Philosophy. London: Kessinger, 2010 [1847].
- Marx, K. and F. Engels, *The Communist Manifesto*. New York: Vintage, 2011 [1848].
- Maturana H. and F. Varela, *The Tree of Knowledge: The Biological Roots of Human Understanding*, R. Paolucci, trans., rev. ed. Boston: Shambhala, 1992.
- Mazzaoui, M. *The Italian Cotton Industry in the Later Middle Ages, 1100-1600*. Cambridge: Cambridge University Press, 1981.
- McCorriston J. and F. Hole, "The Ecology of Seasonal Stress and the Origins of Agriculture in the Near East," *American Anthropologist* 93 (1991):46-69.
- McRae, A. *God Speed the Plough: The Representation of Agrarian England, 1500*-1660. Cambridge: Cambridge University Press, 1996.
- McMurry, L. George Washington Carver: Scientist and Symbol. New York: Oxford University Press, 1981.
- Meek, R. Economics of Physiocracy. London: Routledge, 2013.
- Meier, A. Negro Thought in America, 1880-1915: Racial Ideologies in the Age of Booker

- T. Washington. Ann Arbor: University of Michigan Press, 1998.
- Meikle, S. "Aristotle and the Political Economy of the *Polis*," *Journal of Hellenic Studies* 99 (1979): 52-73.
- Meillassoux, C. "From Reproduction to Production," *Economy and Society* 1 (1972): 93-105.
- -----. *The Anthropology of Slavery: The Womb of Iron and Gold,* A. Dasnois, trans. Chicago: University of Chicago Press, 1991.
- Mendelsoh, I. *Legal Aspects of Slavery in Babylonia, Assyria and Palestine*. Williamsport: The Bayard Press, 1932.
- Mendenhall, G. "The Hebrew Conquest of Palestine," in E. Campbell, Jr., and D. Freedman, eds., *The Biblical Archaeologist Reader III*. New York: Burns & Oates, 1970.
- Merchant, C. *Ecological Revolutions: Nature, Gender and Science in New England.*Chapel Hill: University of North Carolina Press, 2010.
- -----. The Death of Nature. London: Routledge, 1980.
- Meyers, C. "The Roots of Restriction," *Biblical Archaeologist* 41.3 (1978): 95-98.
- Michael, M. "Locke's *Second Treatise* and the Literature on Colonization." *Interpretation* 25 (1998): 407-427.
- Miller, G. *The Mating Mind: How Sexual Choice Shaped the Evolution of Human Nature*. London: Anchor Press, 2000.
- Miller, J. ed., Psychoanalysis and Women. New York: Harmondsworth, 1973.
- Milton, K. "Primate Diets and Gut Morphology," in *Food and Evolution: Toward a Theory of Human Food Habits*, M. Harris and E. Boss, eds. Philadelphia: Temple University Press, 1987.
- Mirowski, P. ed. *Natural Images in Economic Thought*. Cambridge: Cambridge University Press, 1994.
- Mitchell, S. trans. Gilgamesh: A New English Translation. New York: Atria Books, 2006.
- Mitchell, T. "From Reconstruction to Deconstruction: Undermining Black Land Ownership, Political Independence and Community through Partition Sales of Tenancies in Common," *Northwestern University Law Review* 95 (2001): 505-526.

- Mithen, S. *After the Ice: A Global Human History, 20,000-5000 BC.* London: Weidenfeld & Nicolson, 2003.
- Moeller, R. German Peasants and Agrarian Politics, 1914-1924: The Rhineland and Westphalia. Chapel Hill: University of North Carolina Press, 1986.
- Mommsen, T. Römische Geschichte, 3 vols. Leipzig: Demand, 2011 [1854-1856].
- Mondolfo, R. "The Greek Attitude to Manual Labor." *Past and Present* 2 (1952): 62-95.
- Montgomery, *Dirt: The Erosion of Civilizations*. Berkeley: University of California Press, 2012.
- Moore, A. "The Development of Neolithic Societies in the Near East," in F. Wendorf and A. Close, eds., *Advances in World Archaeology*, 4th ed. New York: HB&C, 1985.
- Moore A. and G. Hillman, "The Pleistocene to Holocene Transition and Human Economy in Southwest Asia," *American Antiquity* 57:3 (1992): 482-494.
- Moorey, P. *Ur of the Chaldees*. Ithaca: Cornell University Press, 1982.
- More, T. *Utopia*, M. Turner, trans. London: Cambridge University Press, 1961.
- Morgan, E. American Slavery, American Freedom. New York: W.W. Norton, 2003.
- Morris, I. "The Early *Polis* as City and State," in J. Rich and A. Wallace-Hadrill, eds., *City and Country in Ancient World.* London: Routledge, 1991.
- Morris, J. and Q. Rogers, "Nutritionally Related Metabolic Adaptations of Carnivores and Ruminants," in *Plant, Animal and Microbial Adaptations to Terrestrial Environments*, N. Margaria, M. Arianoutsou-Garaggitaki, and R. Reiter, eds. New York: Columbia University Press, 1983.
- Mossé, C. The Ancient World at Work. New York: Oxford University Press, 1969.
- Mumford, L. "Power Machines," in C. Kraeling and R. Adams, eds., *City Invincible*. Chicago: University of Chicago Press, 1960.
- Munz, P. *The Shape of Time: A New Look at the Philosophy of History* Middletown: Wesleyan University Press, 1977.
- -----. Where the Golden Bough Breaks: Structuralism or Typology? London: Routledge & Kegan Paul, 1973.

- Murdock, G. Ethnographic Atlas. Pittsburgh: University of Pittsburgh Press, 1967.
- Nash, G. *Quakers and Politics: Pennsylvania, 1681-1726.* Princeton: Princeton University Press, 1968.
- Nash, J. "The Aztecs and the Ideology of Male Dominance," SIGNS 4:2 (1978): 349-362.
- Nederman, C. "Property and Protest." Review of Politics 58 (1996): 323-344.
- Neumann, E. The Great Mother. Princeton: Princeton University Press, 1963.
- Nieboer, H. *Slavery as an Industrial System*. Cambridge: Cambridge University Press, 2010 [1900].
- North, D. *The Economic Growth of the United States*, 1790-1860. New York: Norton, 1966.
- Nou, J. *Studies in the Development of Agricultural Economics in Europe*. Uppsala: Almqvist & Wiksells, 1967.
- Novak, D. Natural Law in Judaism. Cambridge: Cambridge University Press, 1998.
- Nye, D. *Electrifying America: Social Meanings of a New Technology*. Cambridge: Cambridge University Press, 1990.
- Oates D. and J. Oates, "Early Irrigation Agriculture in Mesopotamia," *Problems in Economic and Social Archaeology*, G. Sieveking, I. Longworth, and K. Wilson, eds. London: Duckworth, 1976.
- -----. The Rise of Civilization. Oxford: Oxford University Press, 1976.
- O'Brien, M. *The Politics of Reproduction*. London: Routledge, Paul and Kegan, 1981.
- Ochs, C. The Myth Behind the Sex of God: Toward a New Consciousness Transcending Matriarchy and Patriarch. Boston: Beacon Press, 1977.
- Ochshorn, J. *The Female Experience and the Nature of the Divine*. Bloomington: Indiana University Press, 1981.
- Ofek, H. *Second Nature: Economic Origins of Human Evolution*. Cambridge: Cambridge University Press, 2001.
- Ogletree, C. "Repairing the Past." Harvard Civil Rights-Civil Liberties Law Review 38 (2008): 279-563.
- Oliver, K. Women as Weapons of War: Iraq, Sex and the Media. New York: Columbia

- University Press, 2010.
- Olmstead A. and P. Rhode, "Beyond the Threshold: An Analysis of the Characteristics and Behavior of Early Reaper Adopters," *Journal of Economic History* 55 (1995): 27-57.
- Onuf, N. "Sovereignty: Outline of a Conceptual History." *Alternatives* 16 (1991): 425-466.
- Oppenheim, A. *Ancient Mesopotamia: Portrait of a Dead Society*, rev. ed., E. Reiner, ed. Chicago: University of Chicago Press, 1964.
- Ortner, S. "The Virgin and the State," Feminist Studies 4:3 (1978): 19-35.
- Osborne, R. *Demos: The Discovery of Classical Attika*. Cambridge: Cambridge University Press, 1985.
- ----- "Is It a Farm?' The definition of agricultural sites and settlements in ancient Greece," in B. Wells, ed., *Agriculture in Ancient Greece*. Stockholm: Swedish Institute of Athens, 1992.
- -----. "Social and Economic Implications of the Leasing of Land and Property in Classical and Hellenistic Athens," *Chiron* 18 (1988): 279-323.
- Osmond, J. "Land, Peasant and Lord in German Agriculture Since 1800," in R. Scribner and S. Ogilvie, eds. *Germany Since 1800: A New Social and Economic History*. 3 vols. London: Oxford University Press, 1996.
- Ostwald, M. *Nomos and the Beginnings of Athenian Democracy*. Oxford: Oxford University Press, 1969.
- Otterbein, K. Anthropology of War. Long Grove: Rand McNally, 2009 [1973].
- Painter, N. Exodusters: Black Migration to Kansas after Reconstruction. New York: W.W. Norton & Company, 1992.
- ----. The History of White People. New York: W.W. Norton & Co., 2010.
- Painter, S. The Rise of Feudal Monarchies. Ithaca: Cornell University Press, 1951.
- Pagden, A. Lords of All the World: Ideologies of Empire in Spain, Britain and France, c. 1500-1800. New Haven: Yale University Press, 1995.
- Parish, A. "Sex and Food Control in the Uncommon Chimpanzee," *Ethology and Sociobiology* 15:3 (1993): 157-179.

- Parlee, M. "Psychology," Signs 11 (1975): 119-138.
- ----- "The Premenstrual Syndrome," Psychological Bulletin 80 (1973): 454-465.
- Pateman, C. *The Problem of Political Obligation*, 2nd ed. Cambridge: Cambridge University Press, 1985.
- Patterson, C. Eternal Treblinka: Our Treatment of Animals and the Holocaust. New York: Lantern, 2002.
- Patterson, C. Pericles' Citizenship Law 451-450 B.C. New York: Ayer Co., 1981.
- Patterson, O. Freedom, vol. 1: Freedom in the Making of Western Culture. New York: Basic Books, 1991.
- ----- Slavery and Social Death. Cambridge: Harvard University Press, 1982.
- ----- "The Structural Origins of Slavery," *Annals of the New York Academy of Sciences* 292 (1977): 12-32.
- Paul, L. and L. Hirsch, "Human Male Mating Strategies II," *Ethology and Sociobiology* 17 (1996): 71-86.
- Pauly, P. Controlling Life: Jacques Loeb and the Engineering Ideal in Biology. Berkeley: University of California Press, 1990.
- Pease, W. and J. Pease, *Black Utopia*. Madison: University of Wisconsin Press, 1963.
- Pecirka, J. "Land Tenure and the Development of the Athenian *Polis*," in I. Vard and H. Willet, eds., *Geras*. Prague: Charles University Press, 1968.
- Peires, J. *The dead will arise: Nongqawuse and the great Xhosa cattle-killing movement of 1856-7*. Bloomington: University of Indiana Press 1989.
- Pheterson, G. "The Whore Stigma, Female Dishonor and Male Unworthiness," *Social Text* 37 (1993): 39-64.
- Piggot, S. Ancient Europe. Chicago: Transaction Publishers, 1965.
- Pistorius, R. Scientists, Plants and Politics: A history of the plant genetics resources movement. Rome: Bioversity International, 1993.
- Pocock, J. The Machiavellian Moment. Princeton: Princeton University Press, 1975.
- Pohlenz, R. *Freedom in Greek Life and Thought*, C. Lofmark, trans. Dordrecht: Springer Science and Business, 1966.

- Polanyi, K. The Great Transformation. New York: Rinehart, 1944.
- Poliakov, J. *The Aryan Myth: A history of racist and nationalist ideas in Europe*. New York: Plume, 1996.
- Popkin, R. *Newton and Religion: Context, Nature, and Influence.* J. Force and R. Popkin, eds. Dordrecht: Springer, 1998.
- Porter, R. "Creation and Credence," in B. Barnes and S. Shapin, eds., *Natural Order: Historical Studies of Scientific Culture*. Beverley Hills: Sage Publications, 1979.
- Post, J. *The Last Great Subsistence Crisis in the Western World*. Baltimore: Johns Hopkins University Press, 1977.
- Postgate, J. "Some Old Babylonian Shepherds and Their Flocks," *Journal of Semitic Studies* 20 (1975): 1-21.
- Powell, M. "Salt, Seed and Yields in Sumerian Agriculture." *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 75.1 (1985): 7-38.
- Preyer, N. "Why Did Industrialization Lag in the Old South?," *Georgia Historical Quarterly* 55:3 (1971): 378-396.
- Price, J. "Credit in the Slave Trade and Plantation Economies," in *Slavery and the Rise of the Atlantic System*, B. Solow, ed. New York: Cambridge University Press, 1993.
- Price, R., ed. *Maroon Societies: Rebel Slave Communities in the Americas*, 2nd ed. Baltimore: Johns Hopkins University Press, 1979.
- Price, R. The Modernization of Rural France: Communications Networks and Agricultural Market Structures in Nineteenth Century France. New York: St. Martin, 1983.
- Price, T. Europe's First Farmers. Cambridge: Harvard University Press, 2000.
- ------ "Social Inequality at the Origins of Agriculture," in *Pathways to Power: The Foundations of Social Inequality*, T. Price and G. Feinman, eds. New York: Springer, 1995.
- Price T. and A. Gebauer, eds. *Last Hunters, First Farmers: New Perspectives on the Prehistoric Transition to Agriculture.* Santa Fe: School of American Research Press, 1995.
- Pritchard, J. Ancient Near Eastern Tests Relating to the Old Testament. Princeton: Princeton University Press, 1950.

- Proctor, R. "Nazi Biomedical Policies," in *When Medicine Went Mad: Bioethics and the Holocaust.* A. Caplan, ed. New York: Humana Press, 1992.
- Pruitt, A. "Agriculture and Society in the towns of Massachusetts, 1771: A statistical analysis." Ph.D. dissertation, Boston University, 1981.
- Pulleyblank, E. "The Origins and Nature of Chattel Slavery in China," *Journal of Economic and Social History of the Orient* 1:2 (1958): 185-220.
- Pumpelly, R., ed. *Explorations in Turkey, the expedition of 1904: prehistoric civilizations of Anau, Origins, Growth, and Influence of Environment, vol. 1.* Washington, D.C.: Carnegie Institution, 1908.
- Purcell, N. "Wine and Wealth in Ancient Italy." *Journal of Roman Studies* 75 (1985): 1-19.
- Purdue, Jr., C., T. Barden, and R. Phillips, eds., *Weevils in the Wheat*. Charlottesville: University of Virginia Press, 1976.
- Rancière, J. "Who Is the Subject of the Rights of Man?," *South Atlantic Quarterly* 103/2-3 (2004): 300-322.
- Quarles, B. Black Abolitionists. Oxford: Oxford University Press, 1969.
- Raaflaub, K. Die Entdeckung der Freiheit. Munich: Beck, 1985.
- Raaflaub, K. et. al., eds. Origins of Democracy in Ancient Greece. Los Angeles: University of California Press, 2007.
- Rabb, T. The Struggle for Stability in Early Modern England. New York: Vintage, 1975.
- Rafter, N. ed., *White Trash: The Eugenic Family Studies, 1877-191.* Boston: Northeastern University Press, 1988.
- Rapp, R. "The Search for Origins: Unraveling the Threads of Gender Hierarchy," *Critique of Anthropology* 3:9-10 (1977): 5-24.
- Rathbone, D. "The Slave Mode of Production," *Journal of Roman Studies* 73 (1983): 160-168.
- Raynaud, D. J. Jouzel, J. Barnola, J. Chappellaz, J. Delmas, R. & C. Lorius, "The Ice Record of Greenhouse Gases," *Science* 259 (1993): 926-934.
- Redlick, F. Hitler. New York: Oxford University Press, 1999

- Redman, C. *The Rise of Civilization: From Early Farmers to Urban Society in the Ancient Near East.* San Francisco: W.H. Freeman, 1978.
- Reid, C. Slavery, Bondage and Dependency in Southeast Asia. New York: Palgrave Macmillian, 1983.
- Reiter, R. "The Search for Origins," Critique of Anthropology 3:9-10 (1977): 5-24.
- Reiss, T. The Discourse of Modernism. Ithaca: Cornell University Press 1982.
- Reitz, L. "Wheat Breeding and Our Food Supply." *Economic Botany* 8.3 (1954): 253.
- Rhodes, P. Commentary on Athenaion Politeia. Oxford: Oxford University Press, 1961.
- Richardson, R. *et al.* "Was Agriculture Impossible during the Pleistocene but Mandatory during the Holocene?," *American Antiquity* 66:3 (2001): 387–411.
- Rickman, G. The Corn Supply of Ancient Rome. Oxford: Oxford University Press, 1980.
- Ricoeur, P. Time and Narrative, vol. 3. Chicago: University of Chicago Press, 1988.
- Ridley, M. *The Red Queen: Sex and the Evolution of Human Nature.* London: Penguin, 1993.
- Rifkin, J. Beyond Beef: The Rise and Fall of the Cattle Culture. New York: Dutton, 1992.
- Rihill, J. "HEKTEMORI: Partners in Crime." *Journal of Hellenic Studies* 111 (1991): 101-127.
- Riley, J. *The Seven Years War and the Old Régime in France: The Economic and Financial Toll.* Princeton: Princeton University Press, 1986.
- Rindos, D. *The Origins of Agriculture: An Evolutionary Perspective*. Chicago: Academic Press, 1984.
- Riskin, J. Science in the Age of Sensibility: The Sentimental Empiricists of the French Enlightenment. Chicago: University of Chicago Press, 2002.
- ----- "The 'Spirit of System' and the Fortunes of Physiocracy," in *Oeconomies in the Age of Newton*. M. Schabas and N. De Marchi, eds. Durham: Duke University Press, 2003.
- Ritvo, H. *The Animal Estate: The English and other creatures in the Victorian Age.* Cambridge: Harvard University Press, 1987.
- Robinson, J. "Homo 'habilis' and the Australopithecines," Nature 205 (1965): 1-10.

- Rogers, C. *The Lancashire Population Crisis of 1623*. Manchester: University of Manchester Press, 1975.
- Rogers, D. Atlantic Crossings. Cambridge: Harvard University Press, 1998.
- Rohrlich, R. "State Formation in Sumer and the Subjugation of Women." *Feminist Studies* (1980): 78-102.
- Rommel, G. "The Hog Industry: Selection, Feeding and Management Recent American Experimental Work, Statistics of Production and Trade." Bureau of Animal Husbandry, *Bulletin* 47. Washington, D.C.: USGPO, 1904.
- Roth, J. and M. Berenbaum, eds. *Holocaust: Religious and Philosophical Implications*. St. Paul: University of Minnesota Press, 1989
- Root, H. *Peasants and King in Burgundy: Agrarian Origins of French Absolutism*. Berkeley: University of California Press, 1992.
- Rosaldo, M. "The Use and Abuse of Anthropology," SIGNS 5:3 (1980): 409-414.
- Rose, N. The Politics of Life Itself: Biomedicine, power and Subjectivity in the Twenty-First Century. Princeton: Princeton University Press, 2007.
- Rosen, S. "Demographic trends in the Negev Highlands: Preliminary Results from the Emergency Survey." *Bulletin of the American Schools of Oriental Research* (1987): 45-58.
- -----. "Notes on the Origins of Pastoral Nomadism," *Current Anthropology* 23:3 (1988), 501-504.
- Rosenberg, C. *No Other Gods: On Science and American Social Though.* Baltimore: Johns Hopkins University Press, 1976.
- Rosivach, V. "Redistribution of Land in Solon, Fragment 34 West." *Journal of Hellenic Studies* 112 (1992): 153-157.
- Rörig, F. *The Medieval Town*. Berkeley: University of California Press, 1967.
- Ross, I. The Life of Adam Smith. Oxford: Clarendon Press, 1995.
- Rossi, P. The Dark Age of Time: The History of the Earth and the History of Nations from Hooke to Vico, L. Cochrane, trans. Chicago: University of Chicago Press, 1984.
- Rousseau, J.-J. *Discourse on the Origins of Inequality* in *The Basic Political Writings*, D. Cress, trans. Indianapolis: Hackett, 1987.

- ----- "Essay on the Origins of the Languages," in V. Gourevitch, ed., *Discourses and Other Early Political Writings*. Cambridge: Hackett, 1997.
- Rowley-Conwy, "The interpretation of ard marks," Antiquity 61 (1987): 263-266.
- Rowton, M. "Autonomy and Nomadism in Western Asia," *Orientalia* 42 (1973): 247-258.
- ----- "Dimorphic Structure and the Parasocial Element," *Journal of Near Eastern Studies* 36 (1977): 181-198.
- Rubin, J. "The Limits of Agricultural Progress in the Nineteenth Century South," *Agricultural History* 49 (1975): 362-373.
- Russell, J. A History of Agricultural Science in Great Britain. London: Allen and Unwin, 1966.
- Sacks, K. Sister Wives. Urbana: University of Illinois Press, 1982.
- Sanday, P. Female Power and Male Dominance: On the Origins of Sexual Inequality. Cambridge: Cambridge University Press, 1981.
- Sahlins, M. Stone Age Economics. Chicago: Aldine Press, 1972.
- -----. The Segmentary Lineage: An Organization of Predatory Expansion. Chicago: Aldine, 1961.
- -----. Tribesmen. Englewood-Cliffs: Prentice-Hall, 1968.
- ----- "The social life of monkeys, apes and primitive man," *Human Biology* (1959): 54-73.
- -----. "The Origins of Society," *Scientific American* 230:48 (1960): 76-87.
- Saloutos T. and J. Hicks, *Agricultural Discontent in the Middle West, 1900-1939*. Madison: University of Wisconsin Press, 1951.
- Sarpaki, A. "The Palaeoethnobotanical Approach," in *Agriculture in Ancient Greece*, B. Wells ed. Stockholm: Swedish Institute of Athens, 1992.
- Sauer, C., M. Bates, and L. Mumford, eds. *Man's Role in Changing the Face of the Earth*. Chicago: University of Chicago Press, 1956.
- Sax, B. Animals in the Third Reich: Pets, Scapegoats and the Holocaust. New York: A&C Black, 2000.

- Scarre, C. "The World Transformed" in *The Human Past: World Prehistory and the Development of Human Societies*, 3rd ed., C. Scarre, ed. London: Thames and Hudson, 2005.
- Schäfer, A. "W.E.B. Du Bois, German Social Thought, and the Racial Divide in American Progressivism, 1892-1909," *Journal of American History* 88 (2001): 925-949.
- Schaffer, S. "Earth's Fertility as a Social Fact in Early Modern Britain." *Nature and Society in Historical Context*. Cambridge: Cambridge University Press, 1997.
- Schama, S. and R. Porter. *Landscape and Memory*. New York: Oxford University Press, 1995.
- Schiebinger, L. *Nature's Body: Gender in the Making of Modern Science*. Boston: Rutgers University Press, 1993.
- Schild, R. "Terminal Paleolithic of the North European Plain," *Advances in World Archaeology* 3 (1984): 193-274.
- Schmandt-Besserat, D. "The Envelopes That Bear the First Writing," *Technology and Culture* 21:3 (1980): 357-385.
- ----- "Decipherment of the Earliest Tablets." Science 211 (January 1981): 283-285.
- Schmitt, C. *Political Theology: Four Chapters on the Concept of Sovereignty*. Boston: MIT Press, 1985.
- Schneidau, *Sacred Discontent: The Bible and Western Tradition*. Berkeley: University of California Press, 1976.
- Schumpeter, J. Capitalism, Socialism, and Democracy. New York: Routledge, 2013.
- -----. History of Economic Analysis. E. Schumpeter, ed. New York: Routledge, 1954.
- Scott, J. Domination and the Arts of Resistance: Hidden Transcripts. New Haven: Yale University Press, 1990.
- -----. Seeing Like a State. New Haven: Yale University Press, 1998.
- -----. The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia. New Haven: Yale University Press, 2009.
- Seabright, P. "The Birth of Hierarchy," in *Cooperation and Its Evolution*, K. Sterelny, R. Joyce and B. Calcott, eds. Boston: MIT Press, 2013.

- Seed, P. Ceremonies of Possession in Europe's Conquest of the New World, 1462-1640. Cambridge: Cambridge University Press, 1995.
- Service, R. *Primitive Social Organization*. New York: Random House, 1962.
- Sharp, H. "The Power of Weakness," in *Key Issues in Hunter-Gatherer Research*, e. Burch and I. Ellanna, eds. Oxford: Oxford University Press, 1994.
- Shea, J. "Neanderthals, competition, and the origins of modern human behavior in the Levant," *Evolutionary Anthropology* 12 (2003): 173-187.
- ----- "The impact of projectile weaponry on Late Pleistocene hominin evolution," in J. Hublin and M. Richards, eds., *The Evolution of Hominid Diets*. Berlin: Springer Science and Business, 2009.
- Shenk, M., et al., "Intergenerational wealth transmission among agriculturists," *Current Anthropology* 51:1 (2010): 65-83.
- Shennan, S. "Property and wealth inequality as cultural niche construction," *Philosophical Transactions of the Royal Society, Series B: Biological Sciences* 366 (2011): 918-926.
- Shepherd, P. *Man in the Landscape: A Historic View of the Esthetics of Nature*. Atlanta: University of Georgia Press, 2002.
- Sherman, J. Sex-Related Cognitive Differences: An Essay on Theory and Evidence. Springfield: Charles C. Thomas Publishers, 1978.
- Sherratt, A. "Plough and Pastoralism," in *Patterns of the Past*, I. Hodder, G. Isaac, and N. Hammon, eds. Cambridge: Cambridge University Press, 1981.
- -----. "The Secondary Exploitation of Animals in the Old World," *World Archaeology* 15:1 (1983): 90-104.
- Shrire, C., ed. *Past and Present in Hunter Gatherer Societies*. Orlando: Academic Press, 1984.
- Shukin, N. *Animal Capital: Rendering Life in Biopolitical Times*. Minneapolis: University of Minnesota Press, 2009.
- Silverstein, K. "Ford and the Fuhrer: New Documents Reveal the Close Ties Between Dearborn and the Nazis," *The Nation* (January 24, 2000): 11-16.
- Singer, P. "Ethics beyond Species and beyond Instincts," in *Animal Rights: Current*

- *Debates and New Directions.* C. Sunstein and M. Nussbaum, eds. New York: Oxford University Press, 2004.
- Simeone, J. *Democracy and Slavery in Frontier Illinois*. DeKalb: Northern Illinois University Press, 2000.
- Skaggs, J. *Prime Cut: Livestock Raising and Meatpacking in the United States*. College Station: Texas A&M Press, 1986.
- Skipp, V. Crisis and Development. Cambridge: Cambridge University Press, 1978.
- Skinner, E. *A Crime So Monstrous: Face-to-Face with Modern-Day Slavery*. New York: Simon and Schuster, 2008.
- Skinner, Q. "Meaning and Understanding in the History of Ideas," in *Meaning and Context: Quentin Skinner and His Critics*. J. Tully, ed. Princeton: Princeton University Press, 1988.
- Skyrms, B. *The Stag Hunt and the Evolution of Social Structure*. Cambridge: Cambridge University Press, 2003.
- Smith, B. *Heinrich Himmler*. Stanford: Stanford University Press, 1971.
- Smith, B. *Rivers of Change: Essays on Early Agriculture in Eastern North America*. Birmingham: University of Alabama Press, 2007.
- -----. The Emergence of Agriculture. New York: Scientific American Library, 1995.
- Smith C. and J. Cothren, eds. *Cotton: Origin, History, Technology and Production*. New York: John Wiley and Sons, 1999.
- Smith, E. "Human Behavioral Ecology: I," *Evolutionary Anthropology* 1 (1992): 20-25.
- ----- "Human Behavioral Ecology: II," Evolutionary Anthropology 1 (1992): 50-55.
- Smith, E., K. Hill, F. Marlowe, *et al.*, "Wealth transmission and inequality among huntergatherers," *Current Anthropology* 51:1 (2010): 19-34.
- Smith, H. et al., *Introduction to Technocracy*. New York: John Day, 1933.
- Smith, K. *African American Environmental Thought: Foundations*. Lawrence: University Press of Kansas.
- Smith, M. "Time, Slavery and Plantation Capitalism in the Antebellum American South," *Past & Present* 150 (1996): 142-148.

- Smith, P. and L. Horvitz, "Radiographic evidence for changing patterns of animal exploitation in the southern Levant." *Journal of Archaeological Science* 11 (1984): 467-475.
- Snodgrass, A. *Archaic Greece: The Age of Experiment*. Berkeley: University of California Press, 1980.
- -----. Dark Age of Greece: An Archeological Survey of the Eleventh to the Eighth Centuries, BC. Edinburgh: Psychology Press, 1971.
- Sober E. and D. Wilson, *Unto Others*. Cambridge: Harvard University Press, 1998.
- Sonnenscher, M. Work and Wages. Cambridge: Cambridge University Press, 1989.
- Speiser, E. "The Biblical Idea of History in its Common Near Eastern Setting," in *Oriental and Biblical Studies*. Philadelphia: Temple University Press, 1967.
- Spruyette, J. Early Harness Systems, M. Littauer, trans. London: J.A. Allen, 1983.
- Spoor, F., M. Leakey, *et al.*, "Implications of new early *Homo* fossils from Ileret, east of Lake Turkana, Kenya," *Nature* 448:9 (2007): 688-691.
- Spruyt, H. *The Sovereign State and Its Competitors: An Analysis of Systems Change.* Princeton: Princeton University Press, 1996.
- Spurr, M. *Arable Cultivation in Roman Italy, c. 200 BC c. AD 100.* London: Society for the Promotion of Roman Studies, 1986.
- Stampp, K. The Peculiar Institution. New York: Vintage, 1956.
- Starr, C. *Individual and Community: The Rise of the Polis 800-500 BC.* New York: Oxford University Press, 1986.
- Stasavage, D. *Public Debt and the Birth of the Democratic State: France and Great Britain 1688-1789.* Cambridge: Cambridge University Press, 2003.
- Stein, R. *The French Slave Trade in the Eighteenth Century*. Madison: University of Wisconsin Press, 1979.
- Stephenson, C. and B. Lyon, eds. *Medieval Institutions: Selected Essays*. Ithaca: Cornell University Press, 1954.
- Sterelny, K. "From hominins to humans," *Philosophical Transactions of the Royal Society, Series B* 366:1566 (2011): 809-822;
- ----- "SNAFUS: An evolutionary perspective," *Biological Theory* 2:2 (2007):

- 317-328.
- -----. *The Evolved Apprentice*. Cambridge: Cambridge University Press, 2012.
- -----. "Life in Interesting Times," in *Evolution and Its Cooperation*. K. Sterelny, R. Joyce, and B. Calcott, eds. Boston: MIT Press, 2013.
- Stevens, C. "Agriculture and Rural Life in the Later Roman Empire," *Cambridge Economic History*, 2 vols. Cambridge: Cambridge University Press 1941.
- Stiles, T. *The First Tycoon: The Epic Life of Cornelius Vanderbilt*. New York: Knopf, 2009.
- Stoll, S. Larding the Lean Earth: Soil and Society in Nineteenth-Century America. New York: Macmillian, 2002.
- -----. The Fruits of Natural Advantage: Making the Industrial Countryside in California. Berkeley: University of California Press, 1998.
- Stone, M. When God Was a Woman. New York: Barnes & Noble Publishing, 2012.
- Strayer, J. On the Medieval Origins of the Modern State. Princeton: Princeton University Press, 1970.
- -----. The Reign of Philip the Fair. Princeton: Princeton University Press, 1980.
- Struve, W. and I. Tyumenev, "The Problem of the Genesis, Development and Disintegration of the Slave Societies of the Ancient Orient," in Diakonoff, ed. *Ancient Mesopotamia: Social and Economic History*. Moscow, 1969.
- Stuart, A. Consuelo and Alva Vanderbilt. New York: Knopf, 2007.
- Sward, K. The Legend of Henry Ford. New York: Reinhart, 1948.
- Tani, Y. "The geographical distribution and function of sheep flock leaders:," in J. Clutton-Brock, *The Walking Larder*. London: Unwin Hyman, 1989.
- Tanner, N. and A. Zihlman, "Women in Evolution," SIGNS, 1:3 (1976): 585-608.
- Taylor, P. Labor on the Land: Collected Writings, 1939-1970. New York: Ayer, 1981.
- Taylor, Y. ed. I Was Born a Slave, 2 vols. Chicago: University of Chicago Press, 1999.
- "The Peculiar Institution," Scientific American (April 2002): 4.
- Théré, C. and L. Charles, "The Writing Workshop of François Quesnay and Making of

- Physiocracy," *History of Political Economy* 40.1 (2008).
- Thirsk, J. "Plough and Pen: Agricultural Writers in the Seventeenth Century," in *Social Relations and Ideas*. T. Ashton, et al., eds. Cambridge: Cambridge University Press, 1993.
- ------. "Agricultural Policy: Public Debate and Legislation." in J. Thirsk, ed., *Agrarian Change*, *1640-1750*, vol. 5. Cambridge: Cambridge University Press, 1985.
- Thirsk, J. and J. Cooper, eds., *Seventeenth Century Economic Documents*. Oxford: Oxford University Press, 1972.
- Thomas, K. *Man and the Natural World: Changing Attitudes in England 1500-1800*. New York: Penguin, 1991.
- Thompson, E. "Slavery in Early Germany," in M. Finley, ed. *Slavery in Classical Antiquity*. London: John Wiley and Sons, 1987.
- Thompson, E. Customs in Common. New York: New Press, 1991.
- Thompson, J. *Models of Value: Eighteenth-Century Political Economy and the Novel.* Durham: Duke University Press, 1996.
- Thorpe, N. "Origins of War," *British Archaeology* 52 (2000): 8-13.
- Thucydides. *History of the Peloponnesian War*, rev. ed. R. Warner, trans. New York: Penguin, 1974.
- Tilly, C. "Food Supply and Public Order in Modern Europe," in *The Formation of National States in Western Europe*. C. Tilly, ed. Princeton: Princeton University Press, 1975.
- -----. *The Formation of National States in Europe*. Princeton: Princeton University Press, 1975.
- Tilly, L. "The Food Riot as a Form of Political Conflict in France," *Journal of Interdisciplinary History* 1 (1971): 23-57.
- Tiger, L. Men in Groups. New York: Transaction Publishers, 1970.
- Toynbee, A. Hannibal's Legacy, 2 vols. London: Oxford University Press, 1965.
- Toutain, J. The Economic Life of the Ancient World. New York: Routledge, 1968.
- Tracy, M. Agriculture in Western Europe: Crisis and Adaptation since 1880. London:

- Jonathan Cape, 1964.
- Tribe, K. Land, Labour and Economic Discourse. London: Routledge, 1978.
- Trible, P. "Depatriarchalizing in Biblical Interpretation." *Journal of the American Academy of Religion* (1973): 30-48.
- Trigger, B. Sociocultural Evolution. Oxford: Oxford University Press, 1998.
- -----. *Understanding Early Civilizations*. Cambridge: University of Cambridge Press, 2003.
- Tuck, R. *Natural Rights Theories: Their Origin and Development*. Cambridge: Cambridge University Press, 1981.
- Tudge, C. Neanderthals, Bandits, and Farmers: How Agriculture Really Began. New Haven: Yale University Press, 1998.
- Turgot, J. *Turgot on Progress, Sociology, and Economics*. R. Meek, trans. and ed. Cambridge: University of Cambridge Press, 1973.
- Turner, F. Frontier in American History. New York: Courier, 2010.
- Turner, J. *The Politics of Landscape: Rural Scenery and Society in English Poetry, 1630-1660.* Cambridge: Cambridge University Press, 1979.
- Tyumenev, A. "The State Economy of Ancient Sumer," in Diakonoff, ed., *Ancient Mesopotamia: Socio-Economic History*. I. Diakonov, ed. Moscow: Nauka Publishing, 1969.
- ------ "The Working Personnel on the Estate of the Temple BaU in Lagos during the Period of Lugalanda and Urukagina," in Diakonoff, ed., *Ancient Mesopotamia: Socio-Economic History*. I. Diakonov, ed. Moscow: Nauka Publishing, 1969.
- Unser, D. "Food Marketing and Interethnic Exchange in the 18th—century lower Mississippi Valley." *Food and Foodways*. 1.3 (1986): 279-310.
- Upadhyaya, K. "Bonded Labor in South Asia," in C. van den Anker, ed., *The Political Economy of New Slavery*. New York: Palgrave Macmillian, 2004.
- Ure, A. The Philosophy of Manufactures; or, An Exposition of the Scientific, Moral and Commercial Economy of the Factory System of Great Britain. New York: C. Knight, 1967 [1835].
- U.S. vs. Navarrete, No. 11-20880. U.S. Court of Appeals, Fifth Circuit, December 3,

- van Bath, B. *Agrarian History of Western Europe*, O. Ordish, trans. Cambridge: Cambridge University Press, 1963.
- Vanstiphout, H. "On the Sumerian disputation between the hoe and the plough," *Aula Orientalis* 2 (1984): 239-251.
- Vardi, L. *The Land and the Loom: Peasants and Profit in Northern France, 1680-1800.* Durham: Duke University Press 1993.
- Varro. *On Agriculture*, in *Cato and Varro: On Agriculture*. H. Ash, trans. Cambridge: Harvard University Press, 1934.
- Veblen, T. The Engineers and the Price System. New York: Transaction, 1963 [1921].
- Vehrencamp, S. "A model for the evolution of despotic versus egalitarian societies," *Animal Behavior* 31:3 (1983): 687-682.
- Vercoutter, J. et al., *The Image of the Black in Western Art*, vol. 1, *From the Pharaohs to the Fall of the Roman Empire*. Cambridge: Harvard University Press, 1989.
- Vernant, J.-P. *The Origins of Greek Thought*. Ithaca: Cornell University Press, 1982.
- VerSteeg, R. Early Mesopotamian Law. Durham: Duke University Press, 2000.
- Vidal-Naquet, P. *The Black Hunter*. Baltimore: Johns Hopkins University Press, 1986.
- Virno, P. A Grammar of the Multitude, I. Bertoletti, trans. New York: Verso, 2004.
- von Lang, J. *The Secretary: Martin Bormann, the man who manipulated Hitler.* New York: Random House, 1979
- Voros, A. "The Age of Preparation: Hungarian Agrarian Conditions between 1848-1914," in *The Modernization of Agriculture: Rural Transformation in Hungary,* 1848-1975. J. Held, ed. New York: Columbia University Press, 1980.
- Wacquant, L. "Why Men Desire Muscles," Body and Society 1:1 (1995): 163-180.
- Wakefield, E. A View of the Art of Colonization in The Collected Works of Edward Gibbon Wakefield. M. Prichard, ed. New York: HarperCollins, 1968 [1849].
- Wallerstein, I. The Essential Wallerstein. New York: New Press, 2000.
- Washburn, S. and C. Lancaster, "The Evolution of Hunting," in *Man the Hunter*, R. Lee and I. DeVore, eds. Cambridge: Cambridge University Press, 1968.

- Warren, W. The Legacy of the Civil War. Lincoln: University of Wisconsin Press, 1998.
- Watson, J. "Transactions in People," in *Asian and African Systems of Slavery*. J. Watson, ed. Berkeley: University of California Press, 1980.
- Weber, M. Roman Agrarian History. New York: Regina Books, 2008.
- ----- "The Social Causes of the Decay of Ancient Civilizations," in *Theory of Social and Economic Organization* (1964): 276-77.
- Webster, C. *The Great Instauration: Science, Medicine and Reform, 1626-1660.* London: Duckworth, 1980.
- Weiss, H. ed. *The Origins of Cities in Dry-Farming Syria and Mesopotamia in the Third Millennium*. London: Four Quarters Publishing Co., 1986.
- Weiss, J. *Ideology of Death*. Chicago: Ivan Dee Publisher, 1996
- Weiss, R. "Racism and Industrialization," in G. Nash and R. Weiss, eds. *The Great Fear:* Race in the Mind of America. New York: Holt, Rinehart and Winston, 1970.
- Weisstein, N. "Kinder, Küche, Kirche as Scientific Law," in R. Morgan, ed., Sisterhood is Powerful: An Anthology from the Woman's Liberation Movement. New York: Vintage, 1970.
- Wenke, R. and D. Olszewski, *Patterns in Prehistory*, 5th ed. New York: Oxford University Press, 2007.
- Westbrook, R. "Slave and Master in Ancient Near Eastern Law," *Chicago-Kent Law Review* 70 (1995): 1631.
- Westrup, C. *Introduction to Early Roman Law*, 2 vols. Oxford: Oxford University Press, 1944.
- White J. "Incorporating Heterarchy into Theory on Socio-Political Development: The Case from Southeast Asia," in *Heterarchy and the Analysis of Complex Societies*. R. Ehrenreich, C. Crumley and J. Levey, eds. Archeological Papers of the American Archeological Association 6 (1995): 103-123.
- White, K. "Latifundia." Bulletin of the Institute of Classical Studies. 14.1 (1967): 62-79.
- -----. Roman Farming. Cambridge: Cambridge University Press, 2010.
- -----. "The efficiency of Roman Farming under the Empire." *Agricultural History* 30.1 (1956): 76-98.

- Whitelam, K. *The Invention of Ancient Israel: The Silencing of Palestinian History*. London: Routledge, 1996.
- Whitridge, A. "Eli Whitney: Nemesis of the South," *American Heritage* 6.3 (1955): 4-11.
- "Why Technocracy?" Information Brief No. 28, 1955. http://technocracy.org
- Wiedemann, T. Greek and Roman Slavery. London: Routledge, 2003.
- Wilbur, C. *Slavery in China During the Former Han Dynasty, 206 BC-AD 25*. Chicago: University of Chicago Press, 1943.
- Wilcox, D. The Measures of Times Past: Pre-Newtonian Chronologies and the Rhetoric of Reflective Time. Chicago: University of Chicago Press, 1987.
- Wilentz, "Many Democracies: On Tocqueville and Jacksonian America," in *Reconsidering Tocqueville's Democracy in America*. New Brunswick: Rutgers University Press, 1988.
- Williams, E. *Capitalism and Slavery*. Chapel Hill: University of North Carolina Press, 1944.
- Willis, J. ed., *Slaves and Slavery in Muslim Africa*, vol. 1. *Islam and the Ideology of Enslavement*. London: Routledge, 1985.
- Wilson, E. *Sociobiology*. Cambridge: Harvard University Press, 1975.
- Winks, R. ed., Slavery: A Comparative Perspective. New York: Vintage, 1972.
- Winterhalder, B. "The Analysis of Hunter-Gatherer Diets," in *Food and Evolution: Toward a Theory of Human Food Habits.*, M. Harris and E. Boss, eds.
 Philadelphia: Temple University Press, 1987.
- Winterhalder, B. and D. Kennett, "Behavioral Ecology and the Transition from Hunting and Gathering to Agriculture," in Kennett and Winterhalder, eds., *Behavioral Ecology and the Transition to Agriculture*. Berkeley: University of California Press, 2006.
- ----- "Four neglected concepts with a role to play in explaining the origins of agriculture," *Current Anthropology* 50.5 (2009): 645-648.
- Wittfogel, K. *Oriental Despotism: A Comparative Study of Total Power*. New Haven: Yale University Press, 1957.
- -----. "The ruling bureaucracy of Oriental despotism: A phenomenon that paralyzed

- Marx," *The Review of Politics* 15.03 (1953): 350-359.
- Wolf, E. *Europe and the People Without History*. Berkeley: University of California Press, 1982.
- Wolfe, C. Before the Law: Humans and Other Animals in a Biopolitical Frame. Chicago: University of Chicago Press, 2012.
- Wolff, T. "The Thirteenth Amendment and Slavery in the Global Economy," *Columbia Law Review* (2002): 973-1050.
- Wolter, A., ed. and trans. *Duns Scotus on the Will and Morality*. Washington, D.C.: CUA Press, 1986.
- Wood, D. Medieval Economic Thought. Cambridge: Cambridge University Press, 2002.
- Wood, E. *Peasant, Citizen, and Slave: The Foundations of Athenian Democracy.* London: Routledge, 1988.
- -----. Liberty and Property: A Social History of Western Political Thought from the Renaissance to Enlightenment. London: Verso, 2002.
- ----. The Origins of Capitalism. London: Verso, 2002.
- Wood, E. and N. Wood. A Trumpet of Sedition: Political Theory and the Rise of Capitalism. New York: New York University Press, 1997.
- ------. Class Ideology and Ancient Political Theory: Socrates, Plato and Aristotle in Social Context. New York: Oxford University Press, 1978.
- Wood, N. Foundations of Political Economy: Some Early Tudor Views on State and Society. Berkeley: University of California Press, 1994.
- ----- John Locke and the Origins of Agrarian Capitalism. Berkeley: University of California Press, 1995.
- ----- "Thomas Hobbes and the Crisis of the English Aristocracy." *History of Political Thought* 1 (1980): 452-523.
- Woodburn, J. "Ecology, nomadic movement and the local group," in Ucko, Tringham, and Dimbleby, eds., *Man, Settlement, and Urbanism*. London: Duckworth, 1972.
- Wootton, J. ed. Political Writings of John Locke. New York: Penguin, 1993.
- Wrangham, R. Catching Fire: How Cooking Made Us Human. New York: Basic, 2009.

- Wright, G. "American Agriculture and the Labor Market: What Happened to Proletarianization?" *Agricultural History* 62 (1988): 179-200.
- ----- "Slavery and American Agricultural History," *Agricultural History*. 77.4 (2003): 527-552.
- ----- Slavery and American Economic Development. Baton Rouge: Louisiana State University Press, 2006.
- Wright, G. "Social Differentiation in the Early Natufian," in C. Redman, ed., *Social Archaeology: Beyond Subsistence and Dating*. New York: Academic Press, 1978.
- Wright, H. and G. Johnson, "Population, Exchange, and Early State Formation in Southwestern Iran," *American Anthropologist* 77:2 (1975): 267-289.
- Wolkstein, D. and S. Kramer. *Inanna: Queen of Heaven and Earth: Her Stories and Hymns from Sumer*. New York: Harper and Row, 1983.
- Yeo, C. "The Economics of Roman and American Slavery," *Finanzarchiv* 13 (1952): 445-485.
- -----. "Land and Sea Transportation in Imperial Italy," *TAPA* 77 (1946): 221-244;
- Yoffee, N. *The Economic Role of the Crown in Old Babylonian Period*. Malibu: Undena Publications, 1977.
- Zimmerman, A. Alabama in Africa: Booker T. Washington, the German Empire, and the Globalization of the New South. Princeton: Princeton University Press, 2010.
- -----. "The Ideology of the Machine and the Spirit of the Factory: Remarks on Babbage and Ure," *Cultural Critique* 37 (1997): 5-29.