Issues of Sustainability in the Works of James C. Scott

A thesis presented to

the faculty of

the Voinovich School of Leadership & Public Affairs

In partial fulfillment

of the requirements for the degree

Master of Science

Isaac Abram

December 2013

©2013 Isaac Abram. All Rights Reserved.

This thesis titled

Issues of Sustainability in the Works of James C. Scott

by

ISAAC ABRAM

has been approved for

the Program of Environmental Studies

and the Voinovich School of Leadership & Public Affairs by

Julie White

Associate Professor of Women's & Gender Studies

Mark Weinberg

Director, Voinovich School of Leadership & Public Affairs

ABSTRACT

ABRAM, ISAAC, M.S., December 2013, Environmental Studies

Issues of Sustainability in the Works of James C. Scott

Director of Thesis: Julie White

This thesis will explore several pertinent issues regarding environmental sustainability that arise in the recent work of James C. Scott, a professor of Anthropology and Political Science at Yale University. As a result of his official academic titles, fellow scholars overlook the applicability of Scott's work to contemporary issues in environmental studies. But even though his academic pedigree might seem an odd mix from which to cull salient insights into issues of environmental sustainability, this thesis will show that Scott's interdisciplinary background gives him a uniquely advantageous vantage point from which to explore environmental issues.

Scott's work offers a panoply of insights that strike at the root of many environmental problems. Chief among his inquiries is the state's role in instigating ecological catastrophe. Scott's analysis of this role is so penetrating and comprehensive that it prompts readers to question the compatibility between the existence of states and prospects for environmental sustainability. The briefest encapsulation of Scott's argument is that states invariably – and perhaps necessarily endeavor to organize existence, and that this organizational compulsion disrupts natural ecological flows, thus producing dire consequences for biota. A second, related insight is that human groups who strive to resist the state invariably – and perhaps necessarily exhibit a more balanced, harmonious commingling with the natural order. The conscious evasion of state-like structures among stateless peoples compels them to apply a set of practices that reduce their environmental impact to nearly nil.

These dual insights deserve careful attention given that environmental issues have been thrust to the forefront of social life in recent years. Accordingly, one purpose of this thesis is to recast Scott as one of the most relevant thinkers who can contribute to the conversation regarding sustainability. A second purpose of this thesis is to survey Scott's anthropological studies of Southeast Asian hill peoples. Such a survey will supply an empirical account of the practices that human groups utilized to escape the state's grip while also building sustainable communities. A final purpose of this thesis is to assess whether the practices of these stateless groups enable them to be deemed 'resilient,' and thus provide an inspirational model for achieving environmental sustainability.

DEDICATION

For my sister, Jocelyn Clarice: "Half a league, Half a league, Half a league onward, With a hey-nonny-nonny And a hot cha-cha." — P.G. Wodehouse

ACKNOWLEDGMENTS

I would first like to thank my committee members, Julie White, DeLysa Burnier, and Nancy Manring for all the advice, encouragement, and criticism they have supplied throughout my years at Ohio University. They have all been graciously accommodating, understanding, and supportive through the many fits and starts, delays and confusions, and countless topic changes that this thesis project has undergone. I am forever grateful for their patience, and forever indebted to their guidance. My gratitude for their help and attention could fill a letter longer than this thesis.

I would also like to thank the department of Environmental Studies at Ohio University for making my graduate experience one of the most enriching and memorable times of my life. The intimate atmosphere of camaraderie that they create is unique among my academic encounters. From the first day of orientation to my final day of classes, this group of students, professors, and administrators provided a community of mutual-support that I could gush about endlessly.

Lorraine McCosker's Environmental Studies seminar is worthy of particular attention. Her ability to acquaint students with Athens County through several outdoor excursions proved to be an invaluable, unforgettable, and profoundly educational experience. This course introduced me and my fellow graduate students to many organizations, businesses, individuals, and spaces that intensified our appreciation for Athens, and helped us see the community for the true treasure it is.

Also worth mentioning is Professor Stephen Scanlan's Environmental Sociology course. Aside from being one of the most enlightening college courses of my graduate

years, Professor Scanlan's ability to engage students through meetings with local figures who are involved in sustainability, and through facilitating weekly, informal discussion at Jackie O's, combined to create a realm of learning that was educational beyond expectation.

Another noteworthy class is Professor Geoff Buckley's course in Natural Resource Conservation. Thanks to his brilliantly organized lectures, I can still recall the lessons from almost every class meeting in great detail. To this day I still frequently reference my notes from his lectures, and will undoubtedly continue to do so throughout my academic future. Also deserving of praise were the graduate roundtable discussions that Professor Buckley organized where students were able to chat with the authors of the books assigned in class. ...Just one of many examples of this professor's tendency to go above the call of duty.

Ted Bernard's Concepts in Sustainability seminar was also a tremendously informative experience. Many of the ideas contained in this thesis were originally conceived of and expounded upon as a result of work that was initially completed for his class, and throughout numerous, private conversations with him. Professor Bernard's refreshingly humble demeanor, combined with his sage-like wisdom, was a great inspiration to me and my fellow Environmental Studies students. I consider myself extremely fortunate to have taken his class and to have worked with him independently prior to his retirement, which is a great loss to the department and the university.

And last but certainly not least, many thanks are due to Cheryl Hanzel, whose tireless efforts helped me and my fellow graduate students more than she probably realizes. Without her expert knowledge to help us navigate the labyrinth of university life, we would have all been lost like babes in the woods around the Ridges.

These reflections are just a few of the most luminous gems in a department that overflowed with memorable moments that I will cherish forever.

TABLE OF CONTENTS

9

Abstract	
Dedication	
Acknowledgments	
Chapter 1: Introduction and Project Overview	
Chapter 2: The Unsustainable State	
Chapter 3: Political Ecology Outside the State	
Chapter 4: Conclusion	
Bibliography	
Chapter 2: The Unsustainable State Chapter 3: Political Ecology Outside the State Chapter 4: Conclusion	

CHAPTER 1: INTRODUCTION AND PROJECT OVERVIEW

This thesis will explore several pertinent issues regarding environmental sustainability that arise in the recent work of James C. Scott, a professor of Anthropology and Political Science at Yale University. Scott also refers to himself as a Southeast Asianist and has a reputation as the leading academic scholar on peasant resistance in Southeast Asia. Aside from these official titles Scott is also well-versed in the fields of agronomy, economics, critical theory, subaltern studies, sociology, and history. As a result of his official academic titles, fellow scholars overlook the applicability of Scott's work to contemporary issues in environmental studies. But even though his academic pedigree might seem an odd mix from which to cull salient insights into issues of environmental sustainability, this thesis will show that Scott's multidisciplinary and interdisciplinary background gives him a uniquely advantageous vantage point from which to explore environmental issues.

Despite the fact that Scott's books are not filed on the same shelf as prominent environmental thinkers such as Vandana Shiva, David Orr, Arne Naess, E. O. Wilson, Derrick Jensen, Bill McKibben, Wendell Berry, Gary Snyder, Paul Shepard, Michael Pollan, David Suzuki, and the like, his work offers a panoply of insights that strike at the root of many environmental problems. Chief among his inquiries is the state's role in instigating ecological catastrophe. Scott's analysis of this role is so penetrating and comprehensive that it prompts readers to question the compatibility between the existence of states and prospects for environmental sustainability. The briefest encapsulation of Scott's argument is that states invariably – and perhaps necessarily endeavor to organize existence, and that this organizational compulsion disrupts natural ecological flows, thus producing dire consequences for biota. A second, related insight is that human groups who strive to resist the state invariably – and perhaps necessarily exhibit a more balanced, harmonious commingling with the natural order. The conscious evasion of state-like structures among stateless peoples compels them to apply a set of practices that reduce their environmental impact to nearly nil.

These dual insights deserve careful attention given that environmental issues have been thrust to the forefront of social life in recent years. Accordingly, one purpose of this thesis is to recast Scott as one of the most relevant thinkers who can contribute to the conversation regarding sustainability. The seeming banality of that goal should be balanced against the dramatic conclusions at which Scott arrives, which again include a searing indictment of the state's compatibility with prospects for ecological prosperity. Admittedly, in order to conclusively demonstrate that the state is completely at odds with prospects for environmental sustainability would require an investigation that is beyond the scope of this thesis. Decisively proving that the state is deleterious to ecological health would require the researcher to canvass an overwhelming amount of literature and then compose something on the scale of a tome that would far exceed the parameters of this brief treatise. In light of these limits, this thesis could serve as a prelude to launching deeper inquiries into that topic.

The main reason for studying the topic of the state's compatibility with environmental prosperity is that within the confines of most contemporary discourse the state's existence is simply assumed. Rarely is the state's presence questioned: It appears almost as part of nature. States as a whole are seldom assessed for their environmental impact, or challenged for overburdening the environment. While people do often isolate certain aspects of states for their environmental impact – aspects such as dams, the logging industry, mountaintop removal, natural gas extraction, nuclear waste sites, and the like – people almost never question the environmental implications of the mass settlement, organization, and administration of entire populations over a far-flung geographical area. In many cases the state is the entity to which people turn for solving environmental problems. But after reading Scott's work one is compelled to ask whether the state is the source of the problem rather than the solution. To reiterate, that question will only be considered within the limits of Scott's texts in order to outline his unique contribution to developing an answer.

A second purpose of this thesis is to survey Scott's anthropological studies of Southeast Asian hill peoples. Such a survey will supply an empirical account of the practices that human groups utilized to escape the state's grip while also building sustainable communities. The peoples whom Scott focuses upon are a diverse collection of groups in the highlands of Southeast Asia. For over two millennia these groups have survived and thrived as a result of their ability to evade being absorbed into surrounding states. Of equal importance is the fact that these groups have not left a noticeable ecological footprint in the places where they lived. Their incredibly minimal environmental impact makes these groups worthy of careful study in the context of environmental discourse. Over the years these people have continually achieved the socalled three Es of sustainability, including a prosperous economy, a quality environment, and social equality. This fact alone earns Scott's study a central place in environmental discourse.

A final purpose of this thesis is to assess whether the practices of these stateless groups enable them to be deemed 'resilient,'¹ and thus provide an inspirational - if not entirely replicable model for achieving environmental sustainability. The reason that these groups cannot provide an *entirely* replicable model for sustainability is because some of their practices are tailored to their specific ecological niche – particularly the mountainous terrain and its botanical profile. Given the uniqueness of their landbase and the ways in which it conditions their behavior, one should attempt to elicit from their strategies general principles that can be translated into any locality.

The second chapter will provide an exegesis of Scott's book, *Seeing Like a State*. In this text Scott analyzes the methods that states employ to gain and maintain control over their human population and natural resources. There is an immanent logic in the project of state-making that spurs states to assert dominance over their human inhabitants, as well as flora and fauna. In case after case states attempt to inscribe the principles of scientific rationality onto the landscape and thereby impose abstract

¹ Here it should be noted that the term 'resilient' is being used in accordance with its common definition and also in a slightly more technical fashion. In the book *Resilience Thinking: Sustaining Ecosystems and People in a Changing World*, authors David Salt and Brian Walker develop the concept of "resilience thinking." (Island Press, 2006) In their terminology, resilience thinking is meant to suggest a cognitive disposition that is acutely sensitive to the holistic nature of ecological systems. This weltanschauung views ecological systems as complex organisms that exist in a perpetual flux of adaptation. Salt and Walker argue that a deep understanding and appreciation of this phenomenon will alter people's approach toward developing and implementing projects and policies.

formulas onto a complex web of symbiotic interdependencies. When practiced on a grand scale these patterns of subjugation imperil the indigenous ecology. Therefore any discussion of sustainability must include an honest appraisal of the (exploitive) relationship between the state and the biota within its ambit.

Whereas Chapter Two defines many of the problems that ensue from statebuilding projects, Chapter Three will draw on Scott's work, *The Art of Not Being Governed*, to highlight potential solutions to these problems. In this work Scott details the various practices that Southeast Asian hill people have utilized to evade and repel state forces. These "peripheral peoples" who are approximately 100 million in number reside in the hills and mountains of Zomia.² They "are best understood as runaway, fugitive, maroon communities who have, over the course of two millennia, been fleeing the oppressions of state-making projects in the valleys – slavery, conscription, taxes, corvée labor, epidemics, and warfare."³ Aside from its intriguing political dimensions, Scott's inquiry provides a veritable recipe for achieving collective sustainability.

The fourth and final chapter will consider the implications of Scott's work for the contemporary environmental movement. Many environmental activists reflexively seek redress through state action. But if Scott's conclusions are taken into account, state action is a faulty solution because it reinforces the power of the entity which either caused the environmental problem or acted as a willing accomplice. Therefore this thesis will

² Zomia is a vast territory (2.5 million square kilometers) that stretches from Vietnam to northeastern India, crossing parts of Cambodia, Laos, Thailand, and Burma, as well as four provinces in China (Yunan, Guizhou, Guangxi, and parts of Sichuan).

³ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u> <u>Asia</u>, (New Haven: Yale University Press, 2009) ix.

conclude by advancing three arguments: First, the works of James C. Scott should be enthusiastically welcomed into the realm of environmental discourse; second, mainstream environmentalists must radically reassess their commitment to the state as a device for righting ecological wrongs, since the state is inextricably implicated in those wrongs; and third, Scott's elaboration of anti-state resistance movements in Southeast Asia are not merely a curiosity fit for the corners of academia, but a new/ancient paradigm for inhabiting the earth.

But before proceeding, a few caveats and clarifications about the contents of this thesis are warranted. First, this thesis will frequently use the word 'state.' The benefit of using this word is that it carries no precise definition; that is, the word 'state' is vague in a productive way. There is no such thing as a state with sharply defined features and borders. It is rather a complex tangle of institutions, offices, laws, attitudes, beliefs, et cetera, that knit together and form an indistinct yet coherent 'entity.' Though there is plenty interstitial space that prevents the state from being a blocky monolith free from internal tensions and inconsistencies, it nonetheless features regular patterns of behavior that persist over time and recur so consistently as to constitute a kind of 'logic.'

Without entirely conflating the state and commercial sector into the same conceptual entity, Scott does suggest that they interlock and reinforce each others' power to the point where both can be taken to comprise the same field of forces. In many cases Scott believes that "Commercial logic and bureaucratic logic" are "synonymous."⁴

⁴ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u> <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 18.

Also, Scott insists that he is not offering a wholesale rejection of the state. He is careful to note that states are not univocal institutions, but rather vexed institutions that can occasionally shield the environment or citizens from harm by force of law. He refers to the state as "the ground of both our freedoms and our unfreedoms."⁵ The case that Scott wishes to make "is that certain kinds of states, driven by utopian plans and an authoritarian disregard for the values, desires, and objections of their subjects, are indeed a mortal threat to human well-being."⁶ But here it is worth mentioning that despite the cautious nuance of this claim, over a decade after writing those words Scott's research will lead him to strengthen that claim to include *all* states and not just 'certain kinds of states.'

Scott explicitly claims that he does not want to be viewed as composing "an anarchist case against the state itself."⁷ But he does little to deflect or refute such an interpretation aside from expressing a wish to be distanced from the idea of anarchism. Yet, announcing that he is not composing an anarchist tract should be weighed against a passage where he writes that "I should also acknowledge my debt to anarchist writers (Kropotkin, Bakunin, Malatesta, Proudhon) who consistently emphasize the role of mutuality as opposed to imperative, hierarchical coordination in the creation of social order."⁸ Scott also cites Jane Jacobs and Rosa Luxemburg as inspirational sources.⁹

⁵ Ibid. 7.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid. 6-7.

⁹ Ibid. 6.

which arise from a disposition that is thoroughly skeptical of, and hostile toward hierarchy and centralization of power. As this thesis will show, Scott's work undoubtedly partakes of that tradition.

His insistence that he not be read as offering a rejection of state power is further confused by the fact that he recently released a book entitled *Two Cheers for Anarchism*,¹⁰ and that the subtitle of his penultimate book was *An Anarchist History of Upland Southeast Asia*.¹¹ It is also worth noting that there is seldom a word of praise for state action in Scott's work. Surely nothing in his texts, aside from his own caveats, would suggest that he harbors anything but disdain for state power. One can debate whether Scott's reticence to offer a wholesale condemnation of the state is more a result of scholarly temperance than a conviction of the state's viability, but such an issue need not be addressed here, for its conclusion would have little bearing on the broader aim of Scott's work, which is to provide a historical account of state behavior in relation to the state's population and environment, and the response of people who opted to resist the state.

¹⁰ James C. Scott, <u>Two Cheers for Anarchism: Six Easy Pieces on Autonomy, Dignity, and</u> <u>Meaningful Work and Play</u>, (Princeton: Princeton University Press, 2012).

¹¹ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u> <u>Asia</u>, (New Haven: Yale University Press, 2009).

CHAPTER 2: THE UNSUSTAINABLE STATE

In his book *Seeing Like A State* James C. Scott argues that state administrators see the world in a manner that is incompatible with ecological realities. If the way in which states view the world influences the types of plans and policies they craft, then a clouded or skewed vision could produce disastrous effects. It is worth recalling at the outset that Scott is most always referring to states *in general*, and so his analysis applies to any large-scale political regime. He is also careful to note that his critique of state vision equally applies to administrators in the commercial sector.¹² According to Scott, private businesses now rival the state as the primary abuser of the environment. In fact, he argues that the state can sometimes function as a countervailing force that protects the environment against ecocidal businesses. Nevertheless, Scott views the state as the nidus of environmental catastrophe.

Scott draws attention to an obvious fact that is rarely mentioned: Humans have existed for roughly 150,000 to 200,000 years, whereas states have only existed for about 5,000 years.¹³ Though he raises the point for other reasons, this fact shows that states are neither a necessary or permanent feature of human society. It is therefore possible to imagine a world in which states did not exist since the world was once such a place. This notion can serve to deflect criticisms that humans are simply stuck with the state as the lone social form for perpetuating human cohabitation. More to the point of Scott's claim is that most of the anthropogenic environmental degradation in human history has occurred since the inception of states.¹⁴ One could therefore hypothesize that states have some inherent feature which is either incompatible with or detrimental to the planet's ecology; and it is that hypothesis which Scott seeks to explore.

¹² James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u> <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 18.

 ¹³ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u>
 <u>Asia</u>, (New Haven: Yale University Press, 2009) 3.

¹⁴ Wm. H. Kotke, <u>The Final Empire: The Collapse of Civilization, the Seed of the Future</u>, (Portland: Arrow Point Press, 1993) 1.

Scott began his project by asking a simple question: Why have states always been an enemy to people who move around?¹⁵ This simple question has an equally simple answer: Mobility makes people difficult to exploit. States have always used their populations to enhance state power through taxation, military conscription, corvée labor, and the like. States do not spring into existence with plentiful resources with which to fund themselves and assert their dominion; they must extract resources from their population in order to empower themselves. A mobile population would thus present great difficulties for a state that was aiming to accrue resources. Given that a population's mobility would sap state power, states reasonably concluded that an immobile population was needed in order to help the inchoate state enhance its power. States therefore prefer a sedentary population because settling people in fixed locations enables the state to track them and thus exploit them more easily. Judging by the historical record, Scott concludes that "The permanent settlement of populations is, along with taxes, perhaps the oldest state activity."¹⁶

Scott describes this strategy of settlement as an effort to render the population "legible."¹⁷ It is difficult for states to 'read' a population that is constantly in flux, and so a primary problem that states must solve is finding ways to arrest the population's motility. One effective ploy in that project involves the establishment of permanent addresses, since allotting individuals a fixed location tethers their mobility, thereby

 ¹⁵ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u>
 <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 1.

¹⁶ Ibid. 98.

¹⁷ Ibid. 2.

providing the state with a geographical coordinate where people and their possessions can regularly be found.¹⁸

Another crucial ploy that states used to render their populations legible involved assigning permanent, patrilineal surnames. Scott writes that

The invention of permanent, inherited patronyms was, after the administrative simplification of nature (for example, the forest) and space (for example, land tenure), the last step in establishing the necessary preconditions of modern statecraft. In almost every case it was a state project, designed to allow officials to identify, unambiguously, the majority of its citizens. When successful, it went far to create a legible people. Tax and tithe rolls, property rolls, conscription lists, censuses, and property deeds recognized in law were inconceivable without some means of fixing an individual's identity and linking him or her to a kin group.¹⁹

Once Scott broaches the topic it becomes evident to any reflective reader that the imputing of surnames is a fairly recent phenomenon in human history, occurring mostly within the last millennium. Assigning permanent surname eased routine state activities, such as conscripting soldiers, performing police work, collecting taxes, tracking property and inheritance, controlling epidemics, as well as granting rights typically associated with liberal policies, such as voting rights.²⁰

When combined together, permanent addresses and surnames would enable states to compile population registers. A database of this sort could equip the state with a

¹⁸ Ibid. 71.

¹⁹ Ibid. 65.

²⁰ Ibid. 71.

sufficiently reliable roster with which to track individuals and their activities. In time those activities could become so regularized that states could compose a cadastre which would enumerate an individual's total holdings, thus providing the state with a crude yet reliable account of the resources upon which it could potentially draw.

States further increased society's legibility by imposing official languages that compelled citizens to conform to the linguistic demands of a language which was most familiar to state administrators. Scott writes that "Of all state simplifications... the imposition of a single, official language may be the most powerful, and it is the precondition of many other simplifications."²¹ The designation of one language as 'official' creates a binary that lumps all other languages together into a subordinate category. But such culturally insulting and damaging results were merely the collateral effects of implementing strategies that facilitated the growth of state power.

A final stratagem that states employed to affirm their dominance over a geographic territory was the invention of uniform legal codes that would overshadow and blot out local customs: "The king's ministers were confronted, in effect, with a patchwork of local measurement codes, each of which had to be cracked. It was as if each district spoke its own dialect, one that was unintelligible to outsiders and at the same time liable to change without notice."²² Scott observes that "Nonstate forms of measurement grew from the logic of local practice."²³ One way in which states combated this kaleidoscope of local customs involved introducing standard weights and measures in

²¹ Ibid. 72.

²² Ibid. 29.

²³ Ibid. 25.

order to establish a criterion of value that could mediate all economic transactions. The dizzying variety of local measurements was an intractable hindrance to administrative uniformity. This is why "A thoroughly legible society eliminates local monopolies of information and creates a kind of national transparency through the uniformity of codes, identities, statistics, regulations, and measures."²⁴

As states implemented these strategies to better control their human populations, similar strategies were applied to the population of natural resources. A state's power can be greatly amplified if its territory contains lucrative natural resources. States therefore have an interest in making their stock of natural resources legible in order to identify and exploit those resources. The methods by which states achieved a legible view of the natural world greatly diverge from those used to render a human population legible. In regard to the latter task, the broad goal was to demobilize a roving population. But in regard to generating a legible view of a territory's natural resources, the state approached the task by formulating a new optic that would allow it to 'see.'

The way Scott defines state 'sight' is somewhat counterintuitive. Much of what he says about state vision has a philosophical lineage stretching back to the beginning of the modern era. And not surprisingly, the type of state optics Scott describes also emerged during this era. The eighteenth century German philosopher Immanuel Kant argued that human perception was partially a mental construct rather than a mirror reflection of the external world. The mental image created by human perception does not accurately report the world it encounters. Instead, human perception filters sensory experience into a

²⁴ Ibid. 78.

legible image. Sensory experience does not passively absorb external stimuli, but rather actively participates in creating a visual fabrication of sorts.²⁵ According to Scott, state vision works the same way, actively constructing an image of the natural world. For Scott, states 'see' by generating blind spots.²⁶ This seemingly contradictory notion is meant to convey the idea that states selectively isolate certain aspects of the natural world that are relevant to their needs. So in order to perceive those specific aspects states must blind themselves to the whirl of stimuli that floods the natural world. Put another way, the creation of blind spots is a method by which states filter-out negligible data in favor of data that are valuable or useful for increasing state power. From this it follows that the state's vision becomes increasingly clear as it increases its number of blind spots. Scott writes that

Certain forms of knowledge and control require a narrowing of vision. The great advantage of such tunnel vision is that it brings into sharp focus certain limited aspects of an otherwise far more complex and unwieldy reality. This very simplification, in turn, makes the phenomenon at the center of the field of vision more legible and hence more susceptible to careful measurement and calculation. Combined with similar observations, an overall, aggregate, synoptic view of a

²⁵ See, Immanuel Kant, <u>Critique of Pure Reason</u>, (Boston: Palgrave Macmillon, 2007).

²⁶ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u> <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 44.

selective reality is achieved, making possible a high degree of schematic knowledge, control, and manipulation.²⁷

As one would predict, states had a special interest in detecting the most remunerative elements of the wilderness. States only bothered to notice environmental features that could be converted into productive assets or salable commodities: "Any value that the land might have for subsistence purposes or for the local ecology was bracketed as aesthetic, ritual, or sentimental values."²⁸ Scott's preferred example of this phenomenon... and this specific example does easily generalize... is state forestry, particularly the kind that emerged in Prussia and Saxony during the nineteenth century. He writes that "By radically narrowing his vision to commercial wood, the state forester had, with his tables, paradoxically achieved a synoptic view of the entire forest. This restriction of focus reflected in the tables was in fact the only way in which the whole forest could be taken in by a single optic."²⁹

But as mentioned, this seemingly comprehensive view was actually an exercise in myopia. Despite its pretensions of attaining an all-encompassing viewpoint, an astonishing convolution of biotic concatenations fell outside its field of vision. Once this sylvan haven of ecological synergies passed through the state's retina, the image that emerged was a stark number registering the forest's potential revenue yield in terms of commercial woods that further represented board-feet of marketable timber and cords of

 ²⁷James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u>
 <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 11.

²⁸ Ibid. 47.

²⁹ Ibid. 15.

firewood for fuel: "Gone was the vast majority of flora: grasses, flowers, lichens, ferns, mosses, shrubs, and vines. Gone, too, were reptiles, birds, amphibians, and innumerable species of insects."³⁰ The idea of the forest as a living habitat is submerged beneath the idea of the forest as an economic resource – what the philosopher Martin Heidegger called "standing reserve" – that was to be managed 'efficiently.'³¹ What also slipped between the cracks of the state's optic were the many parts of trees that proved valuable to people but nevertheless could not be converted into financial receipts: "Here I have in mind foliage and its uses as fodder and thatch; fruits, as food for people and domestic animals; twigs and branches, as bedding, fencing, hop poles, and kindling; bark and roots, for making medicines and for tanning; sap, for making resins; and so forth."³² All in all, Scott concludes that "the parts of the landscape occluded by actual scientific practice – the blind spots, the periphery, and the long view – also constitute a formidable portion of the real world."³³

Again, states must find a way to render their trove of resources legible in order to gain control over those resources and thereby accumulate power. To achieve this goal a method of cataloguing an inventory is necessary. At this point states have three basic options for obtaining visual control over their natural resources: The first option is to draft an accurate map that details the resource stock down to the last stitch of grass. But if

³⁰ Ibid. 13.

³¹ Martin Heidegger, <u>Basic Writings: Second Edition, Revised and Expanded</u>, (New York: Harper Perennial Modern Classics, 2008) 323.

 ³² James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u>
 <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 12.

³³ Ibid. 294.

Scott is correct in claiming that 'seeing' involves the creation of an optical illusion then the prospect of achieving a comprehensive and perspicuous map is precluded. In Jorge Luis Borges short story entitled On Exactitude in Science modern cartographers develop skills of such precision that they create a map which is exactly equal in size and detail to the territory being mapped. This absurd conclusion illustrates Scott's point that all mapping requires abstraction which forsakes reality. A second option would involve drafting a rudimentary map that provides general information, since the creation of a comprehensive map is not a practical option. However, this second option fails to serve the purpose of furnishing the state with precise information. As a result, Scott argues that states opted for a third option which involved making the world conform to the state's vision. As an illustration, Scott distinguishes between traditional husbandry and largescale agriculture: "If the logic of actual farming is one of an inventive, practiced response to a highly variable environment, the logic of scientific agriculture is, by contrast, one of adapting the environment as much as possible to its centralizing and standardizing formulas."34

It would not be inaccurate to say that states *re*made the world so that it would conform to the state's visual preferences. States use several methods for insuring that the natural world is adjusted to suit their desires. One obvious way that states accomplish this task is to domesticate wildness. Domestication is a process of taming the untamed and bringing that which is out of control under the state's control. In regard to their human

³⁴ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u> <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 301.

populations, states enacted policies of domestication by transforming a nomadic population into a sedentary population and then assigning permanent forms of identification to the members of that population. But given that flora and fauna are much less recalcitrant than human subjects, the state can employ an extremely heavy-handed approach in a project of domestication. This is particularly true of flora. But rather than attempting to subjugate florae, states will often times start afresh and completely redesign a territory's ecology; e.g., clearing land and then planting a multi-acre plum orchard on a belt of land where plums are not indigenous.

These projects invariably involve the imposition of a 'rationalized' agronomic scheme. Despite the fact that such an abrupt overhaul of vegetation is traumatic for the ecology, if such a project 'succeeds' then the management of resources will become systematized and predictable, thereby easing the task of manipulation and control.

An initial strategy of 'rationalization' that states employ to increase the ecology's legibility is to apply a framework of linguistic simplification. Given the bewildering complexity of any ecology, simplification is imperative. Simplification is the primary method by which (ironically useful) blind spots are generated. In order to reduce complexity states will favor the 'abstract' over the 'concrete' and the 'general' over the 'particular.' For example, states will redefine nature as a 'natural resource.' From the state's perspective the forest is not a habitat or sanctuary but is instead a stockpile that is available for exploitation. Again, the only value thought to be contained in trees is their latent market potential. Valuable trees become 'timber' and non-marketable trees are considered 'trash' or 'underbrush.' Plants that generate revenue are defined as 'crops'

while plants that compete with them are called 'weeds.' Insects that feed on the crops are called 'pests.' Animals of value are deemed 'livestock' whereas non-commodified animals are named 'predators' or 'varmints.'³⁵ The natural world is thus catalogued according to the needs of the state's commercial power. This propensity was lambasted by the nineteenth century environmental writer Ralph Waldo Emerson when he wrote that "It is not so pertinent to man to know all the individuals of the animal kingdom, as it is to know whence and whereto is this tyrannizing unity in his constitution, which evermore separates and classifies things, endeavoring to reduce the most diverse to one form."³⁶ And as Scott notes, "All empires, as cultural-political enterprises, are necessarily exercises in classification."³⁷

Aside from simplifying matters by means of lexical (re)definition, states also sought to simplify the world *visually*. Turning again to the example of modern forestry in Prussia and Saxony, Scott observes that most of the management methods developed during this era were noticeably visual in character. Scientists of this generation assumed that a forest was orderly if it *looked* orderly and regimented, and so a certain geometric template was stamped upon the forest.³⁸ Whatever degree of order existed after this stamping was merely superficial. Forestry management adopted a certain aesthetic that preferred rectilinear organization to the tangled flora that naturally occurs: "The forest

³⁵ Ibid. 13.

³⁶ Ralph Waldo Emerson, Selected Writings of Ralph Waldo Emerson, (New York: Signet Classic, 1965) 218.

 ³⁷ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u> <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 123.
 ³⁸ Ibid 4

trees were drawn up into serried, uniform ranks, as it were, to be measured, counted off, felled, and replaced by a new rank and file of lookalike conscripts.³⁹ A tousled labyrinth of wild growth was leveled in favor of linear alleys lined with same-age trees. This new ensemble featured an "aboveground order" that states would replicate when designing cities and the interiors of buildings⁴⁰: "Whatever the political and administrative conveniences of a geometric cityscape, the Enlightenment fostered a strong aesthetic that looked with enthusiasm on straight lines and visible order."⁴¹

Administrators sought to impose a uniform arrangement on the extraordinarily complex web of life that existed prior to the forest's commoditization. This process led to a proliferation of sameness that was repeated throughout the landscape. Scott describes an attempt to create, through careful seeding, planting, and cutting, a forest that was easier for state foresters to count, manipulate, measure, and assess. The fact is that forest science and geometry, backed by state power, had the capacity to transform the real, diverse, and chaotic old-growth forest into a new, more uniform forest that closely resembled the administrative grid of its techniques. To this end, the underbrush was cleared, the number of species was reduced (often to monoculture), and plantings were done simultaneously and in straight rows on large tracts.⁴²

³⁹ Ibid. 15.

⁴⁰ Ibid. 18.

⁴¹ Ibid. 55-56.

This insistence on uniformity and standardization exemplified certain aspects of the Enlightenment mentality. Scott refers to this outlook as "high-modernist ideology." As he defines it, high-modernist ideology exuded a "self-confidence about scientific and technical progress, the expansion of production, the growing satisfaction of human needs, the mastery of nature (including human nature), and, above all, the rational design of social order commensurate with the scientific understanding of natural laws. It originated, of course, in the West, as a by-product of unprecedented progress in science and industry."⁴³ In this sense, high-modernist ideology was Promethean, Herculean, and Pythagorean. That is, it emphasized technical solutions on a grand-scale that were guided by numerical algorithms. Given the scope and fervor of its hubristic ambitions, Scott accuses this ideology of being "uncritical, unskeptical, and thus unscientifically optimistic."⁴⁴

This "High-modernist faith" was a politically promiscuous outlook. State administrators across the political spectrum sought to utilize state power for the purposes of achieving grand, utopian changes throughout society, whether it was transforming the natural landscape or altering people's living patterns.⁴⁵ In reflecting upon this highmodernist disposition Scott finds that "At its center was a supreme self-confidence about continued linear progress, the development of scientific and technical knowledge, the expansion of production, the rational design of social order, the growing satisfaction of

⁴³ Ibid. 4.

⁴⁴ Ibid. 4.

⁴⁵ Ibid. 5.

human needs, and, not least, an increasing control over nature."46 The utilitarian state bestowed upon itself the duty to insure the well-being of its human population. This immense task spurred the state to assert its reign over the natural world as well as its populace: "This belief that it was man's destiny to tame nature to suit his interests and preserve his safety is perhaps the keystone of high modernism, partly because the success of so many grand ventures was already manifest."47 The issue that Scott wishes to highlight is that despite the state's best intentions of providing for the welfare of its citizens, state administrators routinely ignored the wisdom of its citizenry in favor of abstract, 'scientific' principles that were deemed superior to the knowledges that citizens harbored. As Scott writes, every state operates under the trance of high modernism's imperial attitude which features an "inability to recognize or incorporate knowledge created outside its paradigm."⁴⁸ The general problem Scott perceives is that "Officials of the modern state are, of necessity, at least one step – and often several steps – removed from the society they are charged with governing. They assess the life of their society by a series of typifications that are always some distance from the full reality these abstractions are meant to capture."⁴⁹ One can detect this prejudicial perspective in the words of President John Adams, who wrote "The whole continent was one continued dismal wilderness, the haunt of wolves and bears and more savage men. Now the forests

49 Ibid. 76.

⁴⁶ Ibid. 89.

⁴⁷ Ibid. 95.

⁴⁸ Ibid. 264.

are removed, the land covered with fields of corn, orchards bending with fruit and the magnificent habitations of rational and civilized people."⁵⁰

The prevalence of high-modernist ideology among administrators led to a preference for mechanization. In an illustrative passage Scott cites a twentieth century method of plant-breeding called 'phytoengineering' which was "born in order to adapt the natural world to machine processing. 'Machines are not made to harvest crops,' noted two proponents of phytoengineering. 'In reality, crops must be designed to be harvested by machines'... Taste and nutritional quality were secondary to machine compatibility."⁵¹ The phrasing of this unction is quite revealing of the mentality that Scott wishes to unmask; for in the opinion of these two proponents of phytoengineering, 'reality' required engineering biota to accommodate machines... a viewpoint that exhibits ominous undertones. To give a more contemporary example, in his book *Tomatoland* the food journalist Barry Estabrook discovered this exact phenomenon influencing the tomato industry. He writes that

Regulations actually prohibit growers in the southern part of Florida from exporting many of the older tasty tomato varieties because their coloration and shape don't conform to what the all-powerful Florida Tomato Committee says a tomato should look like. The cartel-like Committee exercises Orwellian control over tomato exports from the state, and it decrees that slicing tomatoes shipped

⁵⁰ John Adams, <u>The Works of John Adams, Second President of the United States, Volume 2</u>, (Cambridge: Cambridge University Press, 2011) 23.

⁵¹ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u> <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 267.

from South Florida in the winter must be flawlessly smooth, evenly round, and of a certain size. Taste is not a consideration. [...] [The Committee also] delineates down to the millimeter the permissible depth and length of the 'growth' cracks surrounding the scar where the fruit has been attached to the stem.

In this passage one can notice a type of what Michel Foucault would call 'biopower' at work – only in this instance power is exercised over the natural world rather than human bodies.⁵² Foucault describes biopower as "a power whose task is to take charge of life [and which] needs continuous regulatory and corrective mechanisms... Such a power has to quantify, measure, appraise, and hierarchize".⁵³ Biopower is also "a power that exerts a positive [i.e. productive] influence on life, that endeavors to administer, optimize, and multiply it, subjecting it to precise controls and comprehensive regulations".⁵⁴ In regard to the tomato industry, one sees a micropolitics designed to police and control the most minute details of a tomato's body. As Scott observes, "standardized routines of shipping, packaging, and display, has inexorably led to an emphasis on uniformity of size, shape, color, and 'eye appeal.'"⁵⁵ The tomato industry, much like the forestry industry that Scott discusses, is one of numerous sites where

⁵² Michel Foucault, <u>The History of Sexuality Volume 1, An Introduction</u>, (New York: Vintage, 1976) 140.

⁵³ Foucault, <u>The History of Sexuality: An Introduction: Volume 1</u>, (New York: Vintage Books 1990) 144.

⁵⁴ Ibid. 137.

⁵⁵ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u> <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 266.

regulatory techniques are deployed in order to increase productivity as well as administrative control.

Quantifiability was also an essential ingredient in the program advocated by highmodernist ideology. Numerical measurements indicated objectivity and certainty, thus providing a reliable standard for assessing progress. Scott argues that modernist postures caused agronomists to assume that the farmer's sole concern was yields per unit of inputs. This assumption led to the creation of uniform commodities that enabled administrators to produce quantitative comparisons between the yields of different cultivation techniques. The typical "tabulations of acres planted, yield per acre, and total annual production were tallied in aggregate statistics that were the decisive criterion of success in a development program.⁵⁶

Strategies of quantifiability proceeded in tandem with techniques of control. Biological processes which would otherwise unfold naturally were captured by administrators, compelled to operate according to an artificial tempo, and recalibrated to suit a human metric. Seemingly rational reasons were provided for this insistence on the total control of agricultural projects. For example, during the process of domestication agronomists must determine how different inputs affect outputs, such as which herbicide or fertilizer best increases overall yield. This means nature must be converted into a laboratory to the greatest extent possible. As Scott writes, "practical knowledge is represented and codified in a form uncongenial to scientific agriculture. From a narrow scientific view, *nothing* is known until and unless it is proven in a tightly controlled

⁵⁶ Ibid. 294.

experiment.³⁵⁷ Typical laboratory conditions offer a controlled atmosphere that is difficult to recreate in open-air fields. But in order to isolate causal factors the number of ambient variables must be reduced, held constant, or eliminated: "A condition of its rigor was that it severely bracketed, or assumed to be constant, all variables except those bearing directly on the yield of the selected species and on the cost of growing and extracting them.³⁵⁸

Given the scale and depth of projects that sought such tight control over agriculture it would not be an exaggeration to describe them as comprising a kind of agronomic colonialism. Indeed, Scott regards them as such.⁵⁹ Like all imperialistic projects of colonialism, a native population is subdued and domesticated. A new regime of order is then superimposed upon that prostrate population. Members of the native population are forced to conform to one-size-fits-all policies. A heterogeneous blend of biological organisms are either forcibly homogenized (e.g., monocropping) or eradicated. Thus straight-jacketed, the colonized population is easy to manipulate. In Scott's view, scientific agriculture is not merely a method of production, but also a method of control and appropriation.⁶⁰ He argues that

The simple 'production and profit' model of agricultural extension and agricultural research has failed in important ways to represent the complex, supple, negotiated objectives of real farmers and their communities. That model

⁵⁷ Ibid. 306.

⁵⁸ Ibid. 20.

⁵⁹ Ibid. 264.

⁶⁰ Ibid. 311.

has also failed to represent the space in which farmers plant crops – its microclimates, its moisture and water movement, its microrelief, and its local biotic history. Unable to effectively represent the profusion and complexity of real farms and real fields, high-modernist agriculture has often succeeded in radically simplifying those farms and fields so they can be more directly apprehended, controlled, and managed.⁶¹

Despite the seemingly malicious intent of these projects, it is worth restating that they were implemented with hopes of providing for the commonweal. In order to obey standards of rationality administrators are compelled to engrave the principles of scientific instrumentalism into the landscape. But as Michael Bressler writes, "Even though no longer 'visible,' reality in all its complexity remains. Ignoring the facts makes social and economic transformation no less challenging, simply more attractive. In applying formulaic solutions to complex environments, grand schemes are almost certain to fail."⁶² And more often than not, these schemes did fail in some way. Norman Yoffee argues that these formulaic solutions backfired because they "failed to recognize the symbiotic relation among soils, fungi, insects, and so forth, that made the forest resistant to fire and disease. The death of many forests from soil depletion and epidemics was the result of the abstract logic imposed to make forests governable."⁶³

Scott believes that the metaphorical lesson of his inquiry into "scientific production forestry is that it illustrates the dangers of dismembering an exceptionally

⁶¹ Ibid. 262.

⁶² Michael Bressler, "Book Review: Seeing Like A State," Governance, 13.3 (2001): 428.

⁶³ Norman Yoffee, "The Evolution of Simplicity," Current Anthropology, 42.5 (2001): 767.

complex and poorly understood set of relations and processes in order to isolate a single element of instrumental value.⁴⁶ The drift toward monoculture greatly reduces the diversity of insects, mammals, and birds that are essential to soil-building processes, which are the foundation of any sustainable mode of agriculture.⁶⁵ As is obvious to any ecologist, "Monocultures are, as a rule, more fragile and hence more vulnerable to the stress of disease and weather than polycultures are.⁶⁶ But as Scott observes, the prevalence of monoculture is a predictable consequence of refashioning nature as a "commodity machine.⁶⁷

In Scott's view then, states *intentionally* strive to rigidify as they homogenize and hegemonize. Similarities exist between this process of rigidification and a certain period in the life cycle of complex systems known as the 'late-*K* phase'⁶⁸ During this phase entire systems begin to collapse due to the imposition of organizational schemes that interrupt and constrain the natural self-organization of those systems. This phase is described by David Salt and Brian Walker in their book *Resilience Thinking*.⁶⁹

66 Ibid. 21.

⁶⁴ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u> <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 21.

⁶⁵ Ibid. 20.

⁶⁷ Ibid. 21.

⁶⁸ This concept was originally described in a book entitled *Panarchy: Understanding Transformations in Human and Natural Systems*. For further inquiries, see: Lance H. Gunderson and C.S. Holling, Panarchy: <u>Understanding Transformations in Human and Natural Systems</u> (Washington: Island Press, 2002) 296-297.

⁶⁹ David Salt and Brian Walker, <u>Resilience Thinking: Sustaining Ecosystems and People in a</u> <u>Changing World</u>, (Washington: Island Press, 2006).

Specifically, Walker and Salt are concerned with 'complex adaptive systems' which in this case can be defined as an ecological collection of dynamic networks in which myriad, interactive organisms continually mutate, readjust, and self-organize in order to enhance the survivability of the composite to which they all belong. Walker and Salt claim that complex systems become fragile when they ossify. As a system's "internal state becomes more strongly regulated... the system becomes more and more rigid, and resilience declines. The cost of efficiency is a loss in flexibility... Increasing dependence on existing structures and processes renders the system increasingly vulnerable to disturbance."⁷⁰ Yet judging by their behavior it appears that states tend to consider rigidly solid structures as a guarantor of security and strength. But if the aforementioned critics are correct then these structural features in fact threaten a state's security and strength, given that these features inflict undue stress upon the ecology with which they meddle, and which they depend upon for survival. If the ecology is jeopardized then those who depend upon that ecology for sustenance are consequently jeopardized as well. Accordingly, people who wish to immunize themselves against such perilous tampering would find ways to evade the state, since states endanger their physical well-being. The next chapter will discuss these people, along with their tactics of evasion.

⁷⁰ Ibid. 77.

CHAPTER 3: POLITICAL ECOLOGY OUTSIDE THE STATE

The previous chapter ended by discussing the ways in which states threaten the well-being of their populations by attempting to restructure natural arrangements and bring them into accord with principles of 'rational' organization. Humans who sensed the pernicious consequences of (dis)organizing the natural world struggled to evade the state and become self-sufficient. These people fled to territories that remained beyond the state's reach and developed practices that enabled them to survive upon the land without depleting its natural fertility. Scott provides an edifying history of these people and their practices in his book *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*. This chapter will elucidate key findings in Scott's research that inform the wider discussion regarding environmental sustainability.

Scott begins his work by arguing that "modern statecraft is largely a project of internal colonization, often glossed, as it is in imperial rhetoric, as a 'civilizing mission."⁷¹ That is, before states can launch imperial projects that strive to subjugate foreign or domestic territories, those states must first attain dominion over the domestic population. The most relevant aspect of Scott's description of internal colonialism is its recognition that when a territory is colonized, both its human *and non-human* inhabitants are subjected to domination. Scott describes this process of colonialism as involving

 ⁷¹ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u> <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 82.

the absorption, displacement, and/or extermination of the previous inhabitants. It involved a botanical colonization in which the landscape was transformed – by deforestation, drainage, irrigation, and levees – to accommodate crops, settlement patterns, and systems of administration familiar to the state and to the colonists. One way of appreciating the effect of this colonization is to view it as a massive reduction of vernaculars of all kinds: of vernacular languages, minority peoples, vernacular cultivation techniques, vernacular land tenure systems, vernacular hunting, gathering, and forestry techniques, vernacular religion, and so on. The attempt to bring the periphery into line is read by representatives of the sponsoring state as providing civilization and progress – where progress is, in turn, read as the intrusive propagation of the linguistic, agricultural, and religious practices of the dominant ethnic group.⁷²

To briefly recall Scott's point of departure in *Seeing Like a State*, he wondered why states have always been an enemy to people who moved around. His initial answer suggested that this antagonism existed because states wanted total control over their population for purposes of exploitation. In order to achieve that degree of control states developed methods of making their populations legible. If Scott is correct in this assessment then a curiosity might arise for some readers who wonder about the subaltern's reaction to this enforced legibility. One such reader and fellow scholar who is motivated by this curiosity claims that Scott's last two books address both sides of the same coin. He writes that *"The Art of Not Being Governed* fits together nicely with its

 ⁷² James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u>
 <u>Asia</u>, (New Haven: Yale University Press, 2009) 12.

predecessor, *Seeing Like a State*... The two books have complementary arguments; *The Art of Not Being Governed* might equally well have been titled *The People States Can't See*.^{"73}

As the title *The Art of Not Being Governed* suggests, some groups throughout history deliberately strived to escape the state's grip. However, these groups faced an obvious problem: If you glance at a map you will notice that nearly every bit of land is claimed by a state. So, people who wish to evade the state cannot simply move to a stateless territory; instead, they have to develop tactics that enable them to escape the state's reach while still residing within that state's territory.

Given that the dominant political paradigm on planet earth favors statehood – that is, the nation state as the appropriate form of political organization - any group that wishes to elude statehood must adopt practices which allow them to survive in perpetuity without depending upon the state. If these groups are successful in this endeavor then they can aptly be called 'resilient' since resilience indicates traits such as long-term survival, the ability to adapt rapidly when faced with sudden environmental changes, and the capacity to weather misfortune and thrive amidst adversity. Though Scott claims that stateless people are found in several places during every epoch, he focuses on an area called 'Zomia' which is roughly identical to the Southeast Asian massif.⁷⁴ This area

⁷³ Henry Farrell, "The State of Statelessness," The American Interest, Winter (January/February)(2011): 110.

⁷⁴ Zomia is a vast territory (2.5 million square kilometers) that stretches from Vietnam to northeastern India, crossing parts of Cambodia, Laos, Thailand, and Burma, as well as four provinces in China (Yunan, Guizhou, Guangxi, and parts of Sichuan).

contains about one hundred million people.⁷⁵ Scott writes that "Much of the periphery of the state became a zone of refuge or 'shatter zone,' where the human shards of state formation and rivalry accumulated willy nilly, creating regions of bewildering ethnic and linguistic complexity."⁷⁶ This region should interest any scholar who studies the political realm given that "Zomia is the largest remaining region of the world whose peoples have not yet been fully incorporated into nation-states."⁷⁷

These "peripheral peoples" who resided in the hills and mountains of Zomia "are best understood as runaway, fugitive, maroon communities who have, over the course of two millennia, been fleeing the oppressions of state-making projects in the valleys – slavery, conscription, taxes, corvée labor, epidemics, and warfare."⁷⁸ Stateless people consciously chose to avoid wage labor and sedentary agriculture; neither was necessary since they could still reap the benefits of trade without the "drudgery, subordination, and immobility of state subjects."⁷⁹ Civilization had little appeal. Accordingly, "State evasion and state prevention permeate their practices and, often, their ideology as well."⁸⁰

Scott's book disrupts the prevailing narrative regarding the birth of states and civilization. The story that is typically told begins with barbarians living savagely in remote hinterlands until states come along and bless them with political liberty and

⁷⁵ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u> <u>Asia</u>, (New Haven: Yale University Press, 2009) ix.

⁷⁶ Ibid. 7.

⁷⁷ Ibid. ix.

⁷⁸ Ibid.

⁷⁹ Ibid. 10.

⁸⁰ Ibid. 8.

economic security.⁸¹ But in regard to the world Scott describes, the reverse is true: Subjects fled their states to escape the threats that states posed to their political liberty and economic security.⁸² In effect, "states create their own barbarians. The peoples in the 'uncivilized' zones around them are very often their own former subjects or those subjects' descendants. History is not a steady march toward the joys and comforts of civilized life. Until very recently, it was instead a cycle in which precarious states continually hemorrhaged their people and tried to stanch their wounds by taking slaves from other states".⁸³

If this account is correct, then we must dispense with the dominant narrative which asserts that fringy barbarians were gradually graced with civilization as states expanded their ambit. The counternarrative, for which ample evidence can be supplied, claims that hill-dwelling barbarians were initially state subjects who later fled the state; and after fleeing, they deliberately developed an arsenal of tactics for staying stateless. Scott writes that:

Virtually everything about these people's livelihoods, social organization, ideologies, and even their largely oral cultures, can be read as strategic positioning designed to keep the state at arm's length. Their physical dispersion in rugged terrain, their mobility, their cropping practices, their kinship structure, their pliable ethnic identities, and their devotion to prophetic, millenarian leaders

⁸¹ Ibid.

⁸² Thomas J. Thompson, "Book Review, The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia, by James C. Scott," The Independent Review, Summer (2010): 125.
⁸³ Henry Farrell, "The State of Statelessness," The American Interest, Winter (January/February) (2011): 110.

effectively serve to avoid incorporation into states and to prevent states from springing up among them.⁸⁴

Anybody who is familiar with the history of political philosophy cannot help but notice that this account sharply contradicts that of Thomas Hobbes. In Hobbes' renowned work, Leviathan, he ventures a portrayal of what human existence would look like without an institutionalized political regime. Hobbes refers to this as the 'natural condition.' His depiction of life without a formal state is famous for its alarming imagery. He conjures a vision of scattered individuals who are driven by a mix of diffidence and vainglory to compete for scarce natural resources. Each of these individuals lives under the tormenting fear that without a supreme legislator everybody is left to eke out an existence that is persistently plagued by hardship, insecurity, and dread about the human devilry that surrounds them. Hobbes writes that in a world without official civic institutions "men have no pleasure, but on the contrary a great deal of grief, in keeping company where there is no power able to over-awe them all".⁸⁵ In this stateless world, people "are in that condition which is called war, and such a war as is of every man against every man."⁸⁶ And in this hopeless "condition there is no place for industry, because the fruit thereof is uncertain, and consequently, no culture of the earth,... no knowledge of the face of the earth,... no society, and which is worst of all, continual fear

 ⁸⁴ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u>
 <u>Asia</u>, (New Haven: Yale University Press, 2009) x.

⁸⁵ Thomas Hobbes, <u>Leviathan</u>, (Indianapolis: Hackett, 1994) 75.

⁸⁶ Ibid. 76.

and danger of violent death, and the life of man, solitary, poor, nasty, brutish, and short."⁸⁷

Scott replies to this shopworn story by arguing that

This narrative ignores two capital facts. First, as we have noted, it appears that much, if not most, of the population of the early states was unfree; they were subjects under duress. The second fact, most inconvenient for the standard narrative of civilization, is that it was very common for state subjects to run away. Living within the state meant, virtually by definition, taxes, conscription, <u>c</u>orvée labor, and, for most, a condition of servitude; these conditions were at the core of the state's strategic and military advantages.⁸⁸

Scott finds this revelation to be immeasurably important for conceiving of the relationship between people and organized political institutions. For, if people made a conscious decision to put distance between themselves and state power, then "a new element of political agency enters the picture"⁸⁹ in which "marginality is a political stance."⁹⁰ That concept confuses the liberal project of striving to fully incorporate marginal people into the dominant political institutions. Scott's work compels the reader to reimagine marginality as a politically advantageous disposition rather than a subordinate or ostracized position that demands public redress. Instead, Scott interprets

⁸⁷ Ibid.

 ⁸⁸ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u>
 <u>Asia</u>, (New Haven: Yale University Press, 2009) 7.
 ⁸⁹ Ibid. 8.

⁹⁰ Ibid. 30.

Zomia as constituting "a state-resistant social space forged in conscious response and opposition to subordination".⁹¹

When states waged war, when a state's crops failed and famine ensued, when taxes reached crushing proportions, when the state's economy plummeted, the advantages of living outside the state's parameters became increasingly alluring:⁹² "It is as if the tenuous, social compact of state-based society had come undone: elites heading for the center, where the coercive power of the state was most felt, and vulnerable nonelites heading for the periphery, where the coercive power of the state was least felt."⁹³

What Scott finds peculiar about the traditional civilizational tale of progress is "how much of the actual meaning of 'being civilized' boils down to becoming a subject of the padi state",⁹⁴ or how the gauge "for figuring out who is civilized and who is not, turn out to be not much more than an agro-ecological code for state appropriation."⁹⁵ Further elaborating this point, Scott writes that

One has only to list the most salient characteristics of landscapes and peoples beyond the state's easy grasp to produce, simultaneously, a catalogue of primitiveness. Dwelling in inaccessible forests and on hilltops codes as uncivilized. Foraging, forest collecting – even for commercial gain – and swiddening also code as backward. Scattered living and small settlements are, by definition, archaic. Physical mobility and transient, negotiable identities are both

⁹¹ Ibid. 134.

⁹² Ibid. 129 & 142.

⁹³ Ibid. 156.

⁹⁴ Ibid. 119.

⁹⁵ Ibid. 336.

primitive and dangerous. Not following the great valley religions or not being the tax- and tithe-bearing subjects of monarchs and clergy places one outside the pale of civilization.⁹⁶

Though Hobbes' motivations for penning such a chilling account of the 'natural condition' are debatable, the effect was to incite generations of thinkers to assume that life outside the state is fraught with danger, and therefore any reasonable person would embrace state power. Given Hobbes' popularity and influence over the centuries, it is obvious why Scott's account is so novel and apposite: He is offering a narrative that casts the state as the source of hardship and insecurity from which reasonable people fled in order to attain liberty and security. As one critic of civilization puts it, "The 'state of nature' may more appropriately be called the natural anti-state."⁹⁷ Scott's work turns the tables on Hobbes by demonstrating that life under state rule was 'nasty, brutish, and short.' Furthermore, Scott is offering an account that is empirically historical rather than being the product of a thought experiment, as was the case with Hobbes.

Given this contradistinction to Hobbes' account, one might guess that Scott's research supports Jean-Jacques Rousseau's portrayal of the State of Nature, where scattered bands of individuals lived healthily in harmony with nature.⁹⁸ However, this conclusion would be equally misguided because Scott is not supplying a depiction of life prior to the emergence of states. Instead, he is describing how people reacted to the

⁹⁶ Ibid. 337.

⁹⁷ Kevin Tucker, <u>Against Civilization: Readings and Reflections: Enlarged Edition</u>, Ed. John Zerzan, (Los Angeles: Feral House, 2005) 4.

⁹⁸ See, Jean-Jacques Rousseau's *Discourse on the Origin of Inequality*, Part One.

emergence of states. Regardless of what exactly life was like prior to the existence of states, Scott's research indicates that many people preferred to remain autonomous after states had arisen. This preference did not result from ignorance of life under state rule. As Scott notes, the hill people routinely exchanged goods with people who were absorbed into states. Hill people therefore knew what state life had to offer, and made a conscious choice to remain unaffiliated with states.

However, simply because hill people opted out of state rule does not mean that states ceased making efforts to incorporate them. According to Scott's research, states display a persistent attempt to expand their boundaries and assimilate outliers. This persistent endeavor compelled those who wished to remain outside the state's reach to develop a set of practices for either evading or repelling state power. Scott argues that these people achieved a form of life that was carefully crafted to defy the state's repeated attempts to engulf them. Over the centuries their adroit maneuvers would provide the seedbed for a state-repelling society that built its life around "flight, invisibility and illegibility".⁹⁹ In contrast to many human populations throughout history who sought to build permanent structures upward and outward in order to define their culture, the hill people sought to resist permanent structures – whether material, legal, cultural, or ideological. They adopted practices of flight and invisibility and elevated them to the level of 'principles.'

The adoption of such practices yields a manner of being that even words fail to capture. For the same reason that Plato would find it difficult to accommodate Heraclitus'

⁹⁹ Henry Farrell, "The State of Statelessness," The American Interest, Winter (January/February) (2011): 107-113.

ontological flux when developing a metaphysical theory, it is difficult to assign names to the manner of being which the hill people exhibited. For, the core feature of these people was their resistance to harboring core features that would weigh them down, eliminate possibilities, or suspend them in stasis.

Before long these techniques of evasion would accumulate among the hill people who would then serve as repositories of this collected wisdom.¹⁰⁰ Scott refers to this wisdom as '*metis*,' which is a term borrowed from Ancient Greek that suggests a bank of wisdom gleaned from practical experience. It is a form of knowledge/practice which was refined over centuries – or even millennia of trial and error.¹⁰¹ This brand of knowledge is also embedded in local contexts, which distinguishes it from the 'universal' knowledge associated with the quantitative precision of state administration.¹⁰² Scott contrasts this type of wisdom with the abstract, scientific knowledge deployed by states that emphasizes uniformity, standardization, mechanization, and quantification.¹⁰³ In Scott's words, *metis* "seems to better convey the sorts of practical skills that I have in mind than do such plausible alternatives as 'indigenous technical knowledge,' 'folk wisdom,'

 ¹⁰³ Richard O. Mason "Review of Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed, by James C. Scott," The Information Society, 16 (2000): 239.
 ¹⁰⁴ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u> <u>Asia</u>, (New Haven: Yale University Press, 2009) 313.

¹⁰⁰ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u> Asia, (New Haven: Yale University Press, 2009) 174.

¹⁰¹ Michael Adas, "Review: Seeing Like a State," Journal of Social History, 33.4 (2000): 963.

 ¹⁰² James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u>
 <u>Asia</u>, (New Haven: Yale University Press, 2009) 311 & 320.

understood, metis represents a wide array of practical skills and acquired intelligence in responding to a constantly changing natural and human environment" and is "exceptionally difficult to teach apart from engaging in the activity itself."¹⁰⁵ *Metis* thus accords with resilience thinking, whereas instrumental 'knowledge' reflects the over-confident, over-simplified perspective that afflicts state vision. The application of *metis* can only occur in concrete situations that are mutable and indeterminate.¹⁰⁶

As discussed in the previous chapter, state optics did not arise from a direct engagement with the material world, but rather with the contemplation of abstract ideas. As a result the natural world was manipulated to accord with a kind of abstract, numerical order that exists only in human minds. Scott writes that

Much of the world of metis that we have lost is the all but inevitable result of industrialization and the division of labor. And much of this loss was experienced as a liberation from toil and drudgery... But it would be a serious error to believe that the destruction of metis was merely the inadvertent and necessary by-product of economic progress. The destruction of metis and its replacement by standardized formulas legible only from the center is virtually inscribed in the activities of both the state and large-scale bureaucratic capitalism.¹⁰⁷

In contrast the hill peoples accommodated themselves to the demands of the terrain that fostered their nomadic lives. Their knowledge resulted from direct encounters with the world of flora and fauna that they inhabited, as opposed to knowledge derived from

¹⁰⁵ Ibid.

¹⁰⁶ Ibid. 316.

¹⁰⁷ Ibid. 335.

institutionalized instruction and book-learning. Therefore, for hill people, knowledge would allow them to engage the natural world rather than, say, the stock market, courts of law, or trigonometry texts.

One of the most important tactical pieces of knowledge these groups developed involved negotiating the landscape in order to remain hidden from the state. As mentioned, invisibility is of the utmost importance for escaping the state. Given that states wanted to render the entire landscape visible (again, through mapping, cadastral surveys, etc...) in order to better exert control over their geography, maintaining invisibility involved a process of continual flight for the hill people. States formed upon arable plains and plateaus that eased the task of cultivation and traffic. In contrast, stateless groups dispersed among difficult terrain, such as rugged mountains, swamps, and deserts¹⁰⁸ where heavily-armored and well-provisioned martial forces could not move swiftly. As a consequence, mountains were ideal for purposes of fortification: "mountains favored defensive warfare in general and provided innumerable places where a small group could hold off a much larger force".¹⁰⁹ An intimate knowledge of the landscape – known by interaction rather than maps – can thus be utilized as a kind of palisade against state encroachment.

Nearly all history shows that states strive to enlarge their territory rather than shrink it. If a person lives outside the state's boundaries one day, they may be swallowed within its expanding frontier the next day. This dynamic of growth meant that hill people seldom remained idle for long: To do so would invite the same dangers of permanence

¹⁰⁸ Ibid. 6.

¹⁰⁹ Ibid. 165.

and ossification that plagued states; and so mobility was crucial. Aside from seeking refuge by retreating to the mountains, these groups could dramatically enhance their invisibility if they could quickly shift to more remote sites: "The second principle of evasion is mobility: the ability to change location. The inaccessibility of a society is amplified if, in addition to being located at the periphery of power, it can easily shift to a more remote and advantageous site. Just as there is a gradient of remoteness from state centers, so also might we imagine a gradient of mobility from a relatively frictionless ability to shift location to a relative immobility."¹¹⁰ Scott therefore concludes that state-resistant space was not a precise place on the map, but was instead "a position vis-à-vis power" that remained in perpetual flux.¹¹¹ Contrary to prevailing opinion in environmental scholarship that emphasizes a 'sense of place' as a key ingredient to sustainability, one could argue that a 'sense of placelessness' was essential to the hill people's ecological survival.

This continual roving demanded a certain approach to agriculture. Sedentary state populations could cultivate widespread rice padis in the valley where the land was wetter and flatter. The permanence of their living sites thus has its agricultural counterpart in permanent farmlands. According to Scott, states were a symptom of rice cultivation, and vice versa: "Virtually everywhere, wet rice, along with other major grains, is the foundation of early state-making."¹¹² The rise of a substantial state depended upon the presence of a spanning alluvial plain that was hospitable to the cultivation of irrigated

¹¹⁰ Ibid. 184.

¹¹¹ Ibid. 162.

¹¹² Ibid. 41.

rice:¹¹³ "Irrigated rice, then, is best understood politically as the most convenient and typical means of concentrating population and foodstuffs."¹¹⁴ Rice padis foster the state's effort to fix people in space and thereby render them legible, and hence taxable and conscriptable.¹¹⁵ And aside from fixing people in space, rice cultivation also bound people to a rhythm of production that fixed their lives around a single metronome of production – thus domesticating them and rendering them susceptible to state control.¹¹⁶ Scott writes that

Strong reliance on a single crop, as in the larger valleys, comes to dominate the work routines and social organization of much of the population. Each household planted, transplanted, weeded, and harvested the same crop at virtually the same time, and in much the same way. Coordination of water use required a certain level of institutionalized cooperation and dispute settlement. Agricultural uniformity, in turn, facilitated ritual uniformity around the padi plant itself, its harvest rituals and the control of water. A padi-planting society also shaped a common material culture – diet, cuisine, farm implements, plow animals, household architecture, and so on.¹¹⁷

The rice harvest also elevated grain production beyond subsistence levels, thus enabling the surplus production which state-making requires.¹¹⁸

¹¹³ Ibid. 50.

¹¹⁴ Ibid. 65.

¹¹⁵ Ibid. 65 & 74.

¹¹⁶ Ibid. 74-75.

¹¹⁷ Ibid. 252.

¹¹⁸ Ibid. 150.

Unlike sedentary populations, stateless populations must solve the opposite agricultural problem: How to cultivate crops that either enable or facilitate continual movement. That problem is further conditioned by the character of the mountainous terrain. The environmental features of these various mountain locations determined agricultural options, and so groups nestled in the hills at strategic altitudes that maximized agro-economic possibilities.¹¹⁹ Scott observes that "Those who choose to remain in the hills adopt subsistence strategies designed to escape detection and maximize their physical mobility should they be forced to flee again at a moment's notice. Foraging for forest foods is the ultimate in unobtrusive subsistence; it leaves no trace except for the passage of the forager."¹²⁰ The obvious appeal is that the "foraging option is both egalitarian and stateless, while absorption into valley states represents hierarchy and subjecthood."¹²¹

A slightly more permanent method of agro-resistance is swiddening (slash-andburn agriculture). Whereas foraging is nearly appropriation-proof and preventative of social inequality, swiddening is by comparison appropriation resistant, and might allow for a marginal degree of surplus and thus a modicum of internal hierarchy.¹²² Swiddening "fields themselves are 'fugitive,' going in and out of cultivation at irregular intervals – hardly promising material for a cadastral map. The cultivators themselves, of course, are often fugitive as well, moving periodically to be near their new clearings. Registering or

¹¹⁹ Ibid. 18.

¹²⁰ Ibid. 181.

¹²¹ Ibid. 270.

¹²² Ibid. 333.

monitoring such populations, let alone turning them into easily assessable taxpayers, is a Sisyphean task."¹²³

When hill peoples resorted to swiddening they chose "escape crops" that needed little tending and matured quickly.¹²⁴ Root crops and tubers were especially advantageous since they could be planted in scatter patches that did not announce themselves, and were thus difficult for states to detect, confiscate, or destroy.¹²⁵ Crops such as yams, sweet potatoes, cassava/manioc, and yucca resist state appropriation: After ripening they can be kept in the ground for almost two years and harvested at the planter's leisure. As Scott notes, "There is no granary to plunder."¹²⁶ Foods that spoil quickly, foods that have low value per unit weight and volume, foods that require little attention and are not laborintensive, and foods that grow unseen below ground leave little incentive for tax gatherers to pursue, and therefore have a greater escape value.¹²⁷ And even though swiddening is more detectable than raw foraging, it still has commendable political advantages, such as enabling population dispersal, poly-cropping that insures the success of at least some plants, and staggered maturities that allow for sporadic harvests.¹²⁸ These features lead Scott to conclude that "swiddening has been anathema to all state-makers, traditional or modern."¹²⁹ Crops that facilitate a retreat to difficult altitudes and enable

¹²³ Ibid. 282.

¹²⁴ Ibid. 199.

¹²⁵ Ibid. 181.

¹²⁶ Ibid. 195.

¹²⁷ Ibid. 195, 196, & 200.

¹²⁸ Ibid. 159 & 193.

¹²⁹ Ibid. 77.

people to perpetually replenish their own provisions were stigmatized by the state.¹³⁰ The ubiquity of these agro-tactics among hill people serves as evidence that shifting cultivation is primarily a political choice:¹³¹ "shifting cultivation was the most common agropolitical strategy against raiding, state-making, and state appropriation. If it makes sense to think of rugged terrain as representing a friction of distance, then it may make just as much sense to think of shifting cultivation as representing, strategically, the friction of appropriation, a political advantage that, in turn, pays economic dividends."¹³²

Obviously, these methods of agro-resistance aided the preservation of political autonomy. But equally important to the hill peoples was the fact that these agricultural methods also preserved their physical health. Compared to sedentary groups that practice concentrated monoculture cropping, foragers "are more robust, healthier, and freer from illnesses, particularly epidemic zoonotic diseases, than the population of more concentrated sedentary communities".¹³³ Swiddening offered greater nutritional variety than large-scale rice agriculture in the padi states.¹³⁴ The latter type of agriculture was far more susceptible to epidemiological devastation since the "relatively narrow genetic base of grain production provides an ideal epidemiological habitat for the insects, fungi, rusts, and other crop pests".¹³⁵ Monoculture is more vulnerable to instabilities such as harsh weather or crop diseases, whereas mixed cultivation is resilient by comparison. A variety

¹³⁰ Ibid. 200.

¹³¹ Ibid. 191.

¹³² Ibid. 193.

¹³³ Ibid. 186.

¹³⁴ Ibid. 162 & 97.

¹³⁵ Ibid. 160.

of sown seeds creates a buffer against unpredictable environmental factors that can decimate a field of only one plant species. As any contemporary agronomist would agree, "diversity is the enemy of disease".¹³⁶ But this insight remained unseen through the lens of state planners who preferred uniformity over diversity in regard to agriculture and otherwise. Again this demonstrates that the allegedly enlightened 'high-modernist ideology' which Scott believes defined the proclivities of state administrators is at odds with ecological realities, and despite its pretensions of insuring security against the vicissitudes of nature, actually increases insecurity through its designs.

Not only does the variety of crop aid health, but the settings in which those crops were grown and harvested also promoted health.¹³⁷ In contrast,

Sedentary grain cultivation and the rearing of domestic livestock constituted... a great leap forward for infectious diseases. Most of the deadly epidemic diseases from which we suffer – smallpox, flu, tuberculosis, plague, measles, and cholera – are zoonotic diseases that have evolved from domesticated animals. Crowding... means the concentration not only of people but also of domestic animals and the 'obligate' pests that inevitably accompany them... So far as the diseases in question are spread by proximity or through the obligate pests, the density of hosts per se represents an ideal environment for rapidly spreading epidemic diseases.¹³⁸

¹³⁶ Norman Yoffee, "The Evolution of Simplicity," Current Anthropology, 42.5 (2001): 768.

¹³⁷ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u>

<u>Asia</u>, (New Haven: Yale University Press, 2009) 162 & 186. ¹³⁸ Ibid. 158.

So, further corroborating Scott's broader point, contrary to the belief that state's better assured people's welfare than pre-civil life, the concentration of people and cultivars seemed to increase risk and depress standards of human well-being.¹³⁹ Scott argues that the attendant diseases following the settling of populations could accurately be called "diseases of civilization", especially since those diseases first appear in the historical record alongside vast projects of settlement and domestication.¹⁴⁰ Conversely then, increasing the diversity of a people's food profile fortifies them against epidemics.¹⁴¹ Virtually all contemporary and archaeological data testify to "*the resilience and durability of* [crop] *diversity*. Whatever its other virtues or demerits, polyculture is a more stable, more easily sustainable form of agriculture than monocropping."¹⁴²

Just as states preferred the uniformity and homogeneity of crops and agricultural practices, they also preferred the uniformity and homogeneity of identity among their populations. Ideally, states wanted people to shed their idiosyncratic heritage and identify with the state itself: "Identity at the core was a political project designed to weld together the diverse peoples assembled there... Identity was a matter more of performance than of genealogy."¹⁴³ Scott claims that the "wet-rice valleys and the level plains of the typical valley state are not merely topographically flat; they can also be thought of as having been culturally, linguistically, and religiously flattened. The first thing that strikes any observer is the relative uniformity of the valley culture compared to the luxuriant

¹³⁹ Ibid. 186.

¹⁴⁰ Ibid. 159.

¹⁴¹ Ibid. 269.

¹⁴² Ibid. 281.

¹⁴³ Ibid. 80.

diversity of dress, speech, ritual, cultivation, and religious practice to be found in the hills."¹⁴⁴ One way in which states solidify their power is to prescribe official languages, religions (or lack thereof), currencies, customs, and the like. States thereby create an atmosphere wherein citizens feel ineluctably inclined to adopt the official prescriptions. But as Scott's work shows, the hills are rife with a dazzling phantasmagoria of languages and customs, none of which exist in hierarchical relation to any of the others.

Given the tactics of evasion described so far, one might expect hill people to simply develop a means of preserving *their specific* ethnic identity which the state's homogenizing pressures had threatened. However, the hill people's response to the state's culturally homogenizing forces was far more cunning; for, we must recall that their chief aim was state-evasion, not identity-protection. And as one might also expect, hill societies were a composite of people with diverse backgrounds, and thus exhibited a tapestry of ethnicities. Here it is useful to note that people who fled to the hills not only sought to flee the state but were also determined to insure that new state-like structures did not emerge within their fugitive hill society.¹⁴⁵ In Scott's formulation, "A social structure that thwarts incorporation by an outside state also inhibits crystallization of any internal statelike structure."¹⁴⁶ And since hill people could all identify with one value – namely, the desire to remain stateless – they crafted identities which reflected *that* core value. Emphasizing this point, Scott writes that "Even their social structure could fairly be called escape social structure inasmuch as it was designed to aid dispersal and

¹⁴⁴ Ibid. 155.

¹⁴⁵ Ibid. 179.

¹⁴⁶ Ibid. 277.

autonomy and to ward off political subordination."¹⁴⁷ Just as the hill people's chosen terrain resisted state monitoring and control, and just as their agronomic regimes resisted state monitoring and control, so did their patterns of social organization resist those threats.¹⁴⁸ In keeping with his overall thesis, Scott believes that "Social structure, like agricultural technique, is not a given; it is substantially, especially over time, a choice. Much of that choice is in a broad sense political."

Once a group of people becomes 'institutionalized' around a single political identity that defines, for example, leaders, rights, laws, and land tenure, the group tends to concern itself with maintaining and reinforcing that institutionalization. In short, once incipient state features gain traction, a kind of gravitational pull towards the hierarchy and subordination of statehood becomes inescapable. It begins to police and enforce its essentialist notions of common identity and due loyalty.¹⁴⁹ Those who wish to remain beyond the edge of the state's radii of power will employ several evasive techniques. The first strategy of this kind involves a diffusive move toward simpler, smaller, dispersed social units: "The most appropriation-resistant social structures – though they also impede collective action of any kind – are acephalous ('headless') small aggregates of households."¹⁵⁰ These micro-structures are at odds with the massive, concentrated labor power, wealth, and grain reserves that are essential to state formation.¹⁵¹ Political structures within hill society were pliable and fluid, and often self-consciously

¹⁵¹ Ibid. 179.

¹⁴⁷ Ibid. 23 & 214.

¹⁴⁸ Ibid. 207.

¹⁴⁹ Ibid. 265.

¹⁵⁰ Ibid. 208.

contradicted the forms and values of the states from which they fled, thereby producing a more egalitarian society (which usually featured an elevated social status for women).¹⁵²

Disaggregation of this kind produces an amorphous strewing of people that leaves little opportunity for would-be rulers who endeavor to attain political power, nor does it allow the state to extend its power through the chiefs and headmen of local groupings.¹⁵³ It was as if their motto was "Divide that ye be not ruled."¹⁵⁴ The prevention of leaders from arising amongst them also served to prevent state leaders from penetrating their society and absorbing them. Scott cites the fact that British colonists "everywhere preferred autocratic 'tribal' regimes in compact geographical concentrations with which they could negotiate; conversely, they had a distaste for anarchic, egalitarian peoples who had no discernible spokesman."¹⁵⁵

Most Zomians adopted hybrid identities that fused various aspects of the ethnic mélange which riddled hill society. Furthermore, they routinely shifted from one ethnic identity to another depending on which was most advantageous in a given circumstance.¹⁵⁶ The renowned anthropologist Edmund Leach wrote of the hill people that "It appears to be an ineluctable premise of these societies that one changes one's social structure, sometimes even one's 'ethnic' identity, in response to periodic changes

¹⁵² Ibid. 18, 216, & 218-219

¹⁵³ Ibid. 210 & 279.

¹⁵⁴ Ibid. 219.

¹⁵⁵ Ibid. 212.

¹⁵⁶ Henry Farrell, "The State of Statelessness," The American Interest, Winter (January/February)(2011): 110.

in ongoing relations with neighboring civilizations."¹⁵⁷ The bulk of hill people had an arsenal of identities that they could deploy to suit different situations: "A person's ethnic identity in this sense would be the repertoire of possible performances and the contexts in which they are exhibited."¹⁵⁸

To be sure, "The vagueness, plurality, and fungibility of identities and social units have certain political advantages."¹⁵⁹ First of all, it was in the interest of hill people to develop the widest cultural repertoire possible because it was impossible to predict what role they would need to play in a particular situation.¹⁶⁰ Secondly, the tactic of continually morphing identities created a baroque ethnoscape which states could not catalogue, and thus could not grasp or understand. Allowing one's core identity to remain indeterminate upsets the state's ability to find a purchase point to co-opt individuals or groups. Furthermore, a chameleon identity provides people with the ability to eschew orthodoxy; for if there is no set of core beliefs that bind identities and thus constrict behavior, then individuals are afforded an endless horizon of possibilities for social conduct. Given the many benefits of crafting a Janus-faced persona, it is no surprise that

¹⁵⁷ F. K. Lehman, "Burma: Kayah Society as a Function of the Shan-Burma-Karen Context," in Contemporary Change in Traditional Societies, ed. Julian Steward (Urbana: University of Illinois Press, 1967) 59.

 ¹⁵⁸ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u>
 <u>Asia</u>, (New Haven: Yale University Press, 2009) 254.
 ¹⁵⁹ Ibid. 211.

¹⁶⁰ Ibid. 269.

"Most hill cultures have, as it were, their bags already packed for travel across space, across identities, or across both."¹⁶¹

This guicksilver approach to identity bled into the hill people's attitude toward religious affiliation. Zomia not only provided asylum for ostracized ethnicities, but also for 'heretical' religious sects. Heterodoxy in the hills was a consequence of orthodoxy at the center.¹⁶² Although schismatic sects fled to avoid persecution, they also fled to avoid homogenization. But even though they sought to avoid homogenization (i.e., imposed uniformity), they were evidently unopposed to combining their religious beliefs with those espoused by others, so long as their own beliefs were somewhat preserved in the fused 'creole' religion. It is therefore possible to conclude that these sects valued political freedom over religious conviction, given their willingness to blend their religious beliefs with those of other outcast groups. As a result, many hermits, wandering monks, and forest orders roamed the hills preaching a kind of 'oriental' liberation theology laced with prophecy that foresaw the state's inevitable demise.¹⁶³ Prophets and millenarian oracles in the hills served a social function similar to the ancient bards who weaved a welter of disparate stories together into a bricolage that provided the hill peoples with a coherentbut-evolving Ur myth which helped their society jell and develop a collective conscious. And as Scott observes, Zomians were a particularly welcoming audience for the millenarian soothsaying: "It is among these peoples, dispossessed and marginal, respectively, that the more revolutionary, 'world-upside-down' prophetic message makes

¹⁶¹ Ibid. 329.

¹⁶² Ibid. 157.

¹⁶³ Ibid. 156 & 286.

its greatest appeal."¹⁶⁴ But it is of the utmost importance to note that despite this role, bards did not regard themselves as "embroiderers of the truth".¹⁶⁵

Bards were, however, the lone source of cultural metanarratives because hill societies *purposely* refrained from writing or recording *anything*. In his reflections on this peculiar aspect of hill society, Scott concludes that "the absence of writing and texts provides a freedom of maneuver in history, genealogy, and legibility that frustrates state routines".¹⁶⁶. This absence of texts and records reinforces the portraval of hill peoples as backward and illiterate. However, Scott (controversially) argues that Zomians were not *pre*literate, but *post* literate. That is, they were *non* literate, not *ill* iterate. These cultures preferred orality to literacy because the former facilitated state evasion while the latter left a trail of artifacts that could potentially provide the state with leverage for control.¹⁶⁷ Scott claims that "writing is a crucial technology of administration and statecraft. It is hard to conceive of a padi state without cadastral maps of taxable land, registration lists for corvée labor, receipts, record keeping, royal decrees, legal codes, specific agreements and contracts, and lists, lists, lists... without writing."¹⁶⁸ As Scott notes, history attests to an underlying animosity of peasants toward written texts. The keeping of written records was largely the state's province. During rebellions against colonial powers peasants would often first target the official archives, destroying official documents of land titles,

¹⁶⁴ Ibid. 306-307.

¹⁶⁵ Ibid. 233.

¹⁶⁶ Ibid. 220.

¹⁶⁷ Ibid. 221.

¹⁶⁸ Ibid. 228.

tax lists, population records, and other paraphernalia of legibility, or outright burning down the public records office.¹⁶⁹

Scott also prefers the term 'orality' to 'illiteracy' because he wants to cast nonliteracy as a positive medium of cultural life rather than a cultural deficiency.¹⁷⁰ Orality also promotes egalitarianism because *anybody* can tell stories, whereas literacy is a skill that accompanies a degree of privilege and elitism.¹⁷¹ Scott ventures a guess that all hierarchies that want to bridge generations "produce, as a matter of course, 'texts' that assert claims to authority and power."¹⁷² But more importantly, orality acts as a bulwark against the emergence of state structures within hill societies. For one thing, without writing it was difficult to track fixed patronyms, thus inhibiting the transference of elite namesakes.¹⁷³ Also, Scott claims that the

key disadvantage of monuments and written texts is precisely their relative permanence. Contingent though they are, they become... a sort of social fossil that can be 'dug up' at any time, unchanged. Any written text makes a certain kind of orthodoxy possible – whether that text is a legend of origin, an account of migrations, a genealogy, or a religious text [...] Once there is a text as an indisputable point of reference, it provides the kind of yardstick from which

- ¹⁷¹ Ibid. 30.
- ¹⁷² Ibid. 227.
- ¹⁷³ Ibid. 229.

¹⁶⁹ Ibid. 229.

¹⁷⁰ Ibid. 211.

deviations from the original can roughly be judged. This process is most striking when the text in question has been deemed authoritative.¹⁷⁴

Due to the absence of any sanctified or official texts, it is nearly impossible to adjudicate between various 'cases' in order to determine which competing case has precedent or accords with courtly rules. Plus, orality is necessarily confined to the face-to-face crowd that is assembled at the time of the speech act, thus giving it the same social 'presence' as participatory democracy: "The spoken word, like language itself, is a collectivist activity."¹⁷⁵

A culture of orality therefore preserves an atmosphere of social equality while also enabling hill society to remain unencumbered by doctrinal scripts. Narratives thus exist as a living text that can be continuously reshaped to accommodate present needs. This insistence on preserving anti-literacy illustrates the thoroughgoing antifundamentalism of Zomians. But not only did they insure that fable did not cement into doctrine, they also spun fables that nurtured egalitarian sentiments. For example, some of the groups had genealogical stories that, when traced to their root, involved Icarus-like figures that fly too near the sun and die as result of their ascendant ambitions. These stories functioned as cautionary tales about hierarchy and state formation.¹⁷⁶

As is evident, Zomians were ever-mindful to guard against budding forms of authority. The methods that Zomians employed to inoculate themselves against statehood were so successful that scholars – whose attempt to grip these people academically

¹⁷⁴ Ibid. 227.

¹⁷⁵ Ibid. 230.

¹⁷⁶ Ibid. 177 & 218.

resembles the state's efforts to grip them administratively – are frequently frustrated at the hill people's ability to bilk tidy taxonomic schema. The incessant fissions among hill groups along with the malleability of individuals within those groups calls into question "the very existence of the units beloved of anthropologists – the village, the lineage, the tribe, the hamlet... On what unit the historian, the anthropologist, or, for that matter, the administrator should fix his gaze becomes an almost metaphysical issue."¹⁷⁷ The 'shatter zones' of Zomia are so entirely splintered with a disorienting amalgam of runaway farmers, political rebels, deserting conscripts, escaped slaves, religious dissidents, villagers fleeing famine and epidemics, and refugees of war who continually mix, disperse, and recombine that academics can only guess at their exact histories or identities.¹⁷⁸ Scott elaborates on these difficulties:

The peopling of Zomia has largely been a state effect. The nearly two millenniadeep movement of peoples from the Yangzi and Pearl river basins and from Sichuan and the Tibetan plateau defies a simple accounting... Theories and legends abound, but verifiable facts are scarce, not least because the 'peoples' in question were designated by so many different and incompatible labels that one can rarely be sure just whom is being specified. There is no reason to assume, for example, that a group designated as Miao – in any case an exonym – in the fifteenth century bears a necessary relation to a group labeled Miao by a Han administrator in the eighteenth century. Nor is the confusion confined to the terminology. In the jumble of repeated migrations and cultural collisions, group

¹⁷⁷ Ibid. 219.

¹⁷⁸ Ibid. 144.

after group was reshuffled and transformed so frequently that there is no reason whatever to assume any long-run genealogical or linguistic continuity to such peoples.¹⁷⁹

As many states rose and fell over the past few millennia, Zomians have survived, thrived, and preserved their health and autonomy while also achieving an unparalleled degree of ecological sustainability and social equality.¹⁸⁰ This resilience is mainly due to their "response diversity" which Walker and Salt define as "the range of different response types existing within a functional group."¹⁸¹ The hill-dwellers' reliance on *metis* as an episteme enhanced their durability. Their centrifugalism, combined with their nimble, labile tactics of evasion equipped them for rapid adaptation. The fugitive character of their communities also nurtured environmental health because their continual movement insured that no individual site would be exhausted of resources. Their porous, shape-shifting identity furnished them with the ability to absorb change, negotiate the interplay of forces that impinged upon their society, and also to repel the brittle, homogenized identity that states tried to foist upon them. Their key ingredients of acephaly, polymorphism, and mobility enabled them to remain elemental and thus defy the state's attempt to render them legible. As Scott summarizes, "State rulers find it well nigh impossible to install an effective sovereignty over people who are constantly in motion, who have no permanent pattern of organization, no permanent address, whose

¹⁷⁹ Ibid. 137.

¹⁸⁰ Arun Agrawal, "Book Review: The Art of Not Being Governed," Environment, July/August (2010): 53.

¹⁸¹ David Salt and Brian Walker, <u>Resilience Thinking: Sustaining Ecosystems and People in a</u> <u>Changing World</u>, (Washington: Island Press, 2006) 164 & 120-121.

leadership is ephemeral, whose subsistence patterns are pliable and fugitive, who have few permanent allegiances, and who are liable, over time, to shift their linguistic practices and their ethnic identity."¹⁸²

This explication of Scott's research into Zomia's hill people shows how entire lives, cultures, and societies can be shaped by a resistance to states whose ruinous environmental behavior threatens the welfare of its populace. While it would surely be a stretch to claim that Zomians deliver a prototype to be mimicked in every detail, the hill people do demonstrate how, over time, groups can integrate state-defying and ecologically resilient practices into their lives, and eventually become so adept that those practices comprise a counter-world which successfully shirks the ecologically-injurious nation-state paradigm. In this sense, Scott's work serves the commendable purpose of reopening the realm of political possibility in a world that seems ever-more penetrated and overtaken by global capitalism and large-scale political regimes. But in order to indicate the dramatic urgency of Scott's work, the following chapter will begin by providing a snapshot of contemporary environmental conditions. After a broad (but not exhaustive) review of the planet's current environmental condition, this thesis will conclude with a final analysis of Scott's work and its implications for environmental studies.

¹⁸² James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u><u>Asia</u>, (New Haven: Yale University Press, 2009) 28-29.

CHAPTER FOUR: CONCLUSION

At this point readers might think to themselves, Scott has composed a compelling argument about state optics and the negative environmental effects that stem therefrom; however, he has not provided any data that suggest negative environmental impacts have in fact occurred. It is therefore prudent to briefly review some information that substantiates Scott's accusations.

As mentioned earlier, Scott viewed scientific forestry as a telling example of state optics in practice. And indeed, one of the most alarming signs of civilization's impact is planetary forest depletion. Half of the world's original forests are gone,¹⁸³ and their disappearance is a direct result of state and commercial exploitation.¹⁸⁴ Tropical forests are being depleted at an average rate of one acre per second.¹⁸⁵ These forests house one-half of the world's plant and animal species,¹⁸⁶ which are needed to keep biospheres in balance with themselves. Half of the earth's wetlands¹⁸⁷ and a third of its mangroves are

¹⁸³ "Global Deforestation." *Global Change*. University Of Michigan, n.d. Web. 22 Aug 2013. http://www.globalchange.umich.edu/globalchange2/current/lectures/deforest/deforest.html

¹⁸⁴ Ronca, Debra. "How Deforestation Works." How Stuff Works. Science, n.d. Web. 22 Aug

^{2013.} http://science.howstuffworks.com/environmental/green-science/deforestation1.htm

¹⁸⁵ Tropical Forest and Climate Coalition . Union of Concerned Scientists, 18 Aug 2009. Web.

²² Aug 2013. http://www.ucsusa.org/global_warming/solutions/forest_solutions/us-call-for-leadership.html

¹⁸⁶ "The Disappearing Rainforests." *Rainforest Facts*. Rain Tree, n.d. Web. 22 Aug 2013. http://www.rain-tree.com/facts.htm#.UhaUwT9gEi

¹⁸⁷ "The State of the Planet: Vanishing Wetlands." *Journey to Planet Earth*. PBS, n.d. Web. 22 Aug 2013. http://www.pbs.org/journeytoplanetearth/stateoftheplanet/index_wetlands.html

gone,¹⁸⁸ again as a direct result of state and commercial exploitation.¹⁸⁹ The United States alone loses 6,000 acres of open space per day to 'development.'¹⁹⁰ Contemporary society regularly consumes or destroys 40% of nature's photosynthetic output,¹⁹¹ which means states absorb an unfair share of the energy that ecospheres need to maintain ecological stability.

Scientists estimate that 150-200 species go extinct each day,¹⁹² mostly due to habitat destruction caused by state and commercial activities.¹⁹³ Species are disappearing at about 1,000 times the normal rate.¹⁹⁴ One-fifth of animals with backbones face extinction.¹⁹⁵ Ninety percent of large predator fish are gone,¹⁹⁶ 75% of fisheries are fished

¹⁸⁸ "Mangroves in the Margin." *Inside SERC*. Smithsonian Environmental Research Center, n.d. Web. 22 Aug 2013. http://www.serc.si.edu/about/07 feller.aspx

¹⁸⁹ "Mangrove Forests: Threats." *WWF Global*. World Wildlife Fund, n.d. Web. 22 Aug 2013. http://wwf.panda.org/about_our_earth/blue_planet/coasts/mangroves/mangrove_threats/
¹⁹⁰ "Cooperating Across Boundaries." *Forest Service*. United States Department of Agriculture, Aug 2006. Web. 22 Aug 2013. http://www.fs.fed.us/openspace/cooperatingacrossboundaries.pdf
¹⁹¹ Speth, James Gustave. "Why Business Needs Government Action on Climate Change." *Worldwatch Institute*. N.p., n.d. Web. 22 Aug 2013. http://www.worldwatch.org/node/715
¹⁹² "The State of the Planet's Biodiversity." *UNEP*. United Nations Environment Program, n.d.
Web. 22 Aug 2013. http://www.unep.org/wed/2010/english/biodiversity.asp
¹⁹³ Gershon, Eric. "Extinction threat due to habitat loss may be greater than believed." *Yale News*.
Yale University, 27 Jun 2012. Web. 22 Aug 2013. http://news.yale.edu/2012/06/27/extinction-

threat-due-habitat-loss-may-be-greater-believed

¹⁹⁴ "The Five Worst Mass Extinctions." *Endangered Species International*. Endangered Species International, n.d. Web. 22 Aug 2013.

http://www.endangeredspeciesinternational.org/overview.html

¹⁹⁵ Watts, Jonathan. "One-fifth of back-boned animals face extinction: study." *Our World 2.0*. United Nations University, 27 Oct 2007. Web. 22 Aug 2013. http://ourworld.unu.edu/en/one-fifth-of-back-boned-animals-face-extinction-study/

to capacity,¹⁹⁷ and 20% of corals,¹⁹⁸ which are essential to maintaining the health of aquatic environments, are gone. These dramatic figures have led scientists to conclude that we are living in an era of mass extinction more fierce than that which killed the dinosaurs.¹⁹⁹

The United States by itself presents a glaring case study of civilization's impact, given that it is a nation which often behaves as if it operated strictly according to the demands of 'high-modernist ideology.' In the U.S. there are over 70,000 commercial chemicals in use.²⁰⁰ In roughly the past 80 years the use of synthetic chemicals increased from one million to 400 million tons each year.²⁰¹ U.S. chemical companies release around 7.1 billion pounds of 650 pollutants into the water and atmosphere annually.²⁰² One study sampled the blood of nine, ordinary volunteers and found a total of 167 industrial compounds, pollutants, and chemicals - 76 of which cause cancer, 94 of which

¹⁹⁹ Wake, David B., and Vance T. Vredenburg. *Proceedings of the National Academy of the Sciences of the United States of America*. National Academy of the Sciences, n.d. Web. 22 Aug 2013. http://www.pnas.org/content/105/suppl.1/11466.full

¹⁹⁶ "Predatory Fish Decline." *Marine Life Discoveries*. Census of Marine Life, n.d. Web. 22 Aug 2013. http://www.coml.org/discoveries/trends/predatory_fish_decline

¹⁹⁷ Clover, Charles. "Overfishing in 2009." *The End of the Line*. The End of the Line, n.d. Web.22 Aug 2013. http://endoftheline.com/film/the science

¹⁹⁸ "Importance of Coral Reefs." Coral Reefs: A Reef Resilience Toolkit Module. N.p., n.d. Web.

²² Aug 2013. http://www.reefresilience.org/Toolkit_Coral/C7a_Importance.html

²⁰⁰ Stevenson, Mark, "I Am Polluted." Array Of Toxic Chemicals In Humans 'Alarming'.

Rense.com, 08 Mar 2005. Web. 22 Aug 2013. http://rense.com/general63/pol.htm

²⁰¹ "Toxic Chemicals." *WWF Global*. World Wildlife Fund, n.d. Web. 22 Aug 2013.

http://wwf.panda.org/about our earth/teacher resources/webfieldtrips/toxics/

²⁰² "Detoxification: Detoxify in a Toxic World.". Thorne Research, n.d. Web. 22 Aug 2013. http://thorne.com/media/pdfs/DetoxBooklet 07 11.pdf

damage the brain or nervous system, and 79 of which cause birth defects or abnormal development.²⁰³

Dioxin, a synthetic chemical known to cause cancer, birth defects, and impair immune systems,²⁰⁴ pervades the biosphere and laces every link of the food chain.²⁰⁵ Traces of dioxin have been found in many paper products,²⁰⁶ including diapers, tampons, and bath tissue, which is partly why the toxin is found in everybody's body.²⁰⁷ More alarming is the fact that dioxin has been discovered in breast milk worldwide, along with pesticides, heavy metals, and persistent organic pollutants (POPs).²⁰⁸

²⁰⁴ "Dioxin Causes Cancer: EPA Draft." *CBS News*. CBS, 11 Fed 2009. Web. 22 Aug 2013. http://www.cbsnews.com/2100-205 162-196416.html

 ²⁰³ Body Burden: Findings & Recommendations. Environmental Working Group, n.d. Web. 22
 Aug 2013. http://www.ewg.org/sites/bodyburden1/findings.php

²⁰⁵ "Dioxins in the Food Chain: Background." *Animal and Plant Health Inspection*. United States Department of Agriculture, n.d. Web. 22 Aug 2013.

http://www.aphis.usda.gov/animal health/emergingissues/downloads/dioxins.pdf

²⁰⁶ Shabecoff, Philip, "Traces of Dioxin Found in Range Of Paper Goods.". The New York

Times, 24 Sep 1987. Web. 22 Aug 2013. http://www.nytimes.com/1987/09/24/us/traces-of-

dioxin-found-in-range-of-paper-goods.html?pagewanted=all&src=pm

²⁰⁷ Shabecoff, Philip, "Dioxin Traces Found In Paper Products." *Chicago Tribune News*. Chicago Tribume, 24 Sep 1987. Web. 22 Aug 2013. http://articles.chicagotribune.com/1987-09-

^{24/}news/8703120433 1 dioxin-probable-human-carcinogen-paper-products

²⁰⁸ Mead, M. Nathaniel. "Contaminants in Human Milk: Weighing the Risks against the Benefits of Breastfeeding." *Environews*. Environmental Health Prospect, Oct 2008. Web. 22 Aug 2013. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2569122/

PFOA, also called C8, is a synthetic, carcinogenic toxin that contaminates the blood of 98% of the U.S. population²⁰⁹ and 100% of newborns.²¹⁰ PFOAs are known to cause developmental problems and heart disease.²¹¹ This chemical is particularly dangerous because it does not biodegrade, which means that once it is created it will remain in the environment – and in bodies - indefinitely.²¹²

It is estimated that 30 million Americans are at risk of early death due to lead poisoning.²¹³ The symptoms typically associated with aging might actually be symptoms of lead poisoning, such as memory loss, hearing loss, heart attacks and strokes, loss of libido, tooth decay, and loss of balance. Studies have shown that high lead levels in the human body cause children to be less successful in school and more aggressive later in life.²¹⁴

http://www.ncbi.nlm.nih.gov/pubmed/22560884

²⁰⁹ Gardner, Amanda. "Household chemical linked to heart disease." *CNN Health*. CNN, 05 Sep 2012. Web. 22 Aug 2013. http://www.cnn.com/2012/09/04/health/chemical-heart-disease

²¹⁰ Lazarus, David. "Carcinogen worries stick to food packaging." *Los Angeles Times Business*. Los Angeles Times, 30 Jul 2008. Web. 22 Aug 2013. http://www.latimes.com/business/la-fi-lazarus30-2008jul30,0,6975509.column

²¹¹ "Perfluorooctanoic Acid (PFOA) and Fluorinated Telomers." U.S. EPA. United States
Environmental Protection Agency, n.d. Web. 22 Aug 2013. http://www.epa.gov/oppt/pfoa/
²¹² "Perfluorooctanoic acid (PFOA), an emerging drinking water contaminant: a critical review of recent literature.". U.S. National Library of Medicine, Jul 2012. Web. 22 Aug 2013.

²¹³ O'Brien, Elizabeth. ""GREEN LEAD" – OXYMORON OR FUTURE VISION? ." *Global Lead Advice and Support Service*. The Lead Group, 01 Nov 2005. Web. 22 Aug 2013. http://www.lead.org.au/bblp/Green_lead/cplpfacts.html

²¹⁴ "Lead, a Global Poison.". American Association for the Advancement of Science, n.d. Web.

²² Aug 2013. http://www.aaas.org/news/releases/2013/0217_lead_poison.shtml

Another harmful contaminate that pervades the ecosystem is mercury. Thirtythree states have issued warnings regarding fish-consumption as a result of mercury pollution. According to current estimates, state and commercial activities have tripled mercury levels in the atmosphere since the industrial revolution.²¹⁵ Like many other toxins, mercury bioaccumulates, which means that organisms absorb the toxin faster than they can rid themselves of that toxin. Further compounding the danger is the phenomenon of biomagnification, which occurs when one organism consumes another organism, and thus ingests the toxins that have bioaccumulated within the consumed organism. Even if these chemicals were not individually dangerous when concentrated in human bodies, it is not possible to predict the ways in which these chemicals will interact inside the human body. No study has ever – or could ever test the effects of these toxins in their infinite combinations.

According to the World Health Organization, 2.4 million people die annually from air pollution.²¹⁶ Another study found that air pollution, in general, increases people's risk of death by six percent.²¹⁷ The world currently releases about 100 million

²¹⁵ E. Vo, Anh-Thu, Michael S. Bank, James P. Shine, and Scott V. Edwards . "Temporal increase in organic mercury in an endangered pelagic seabird assessed by century-old museum specimens.". Proceedings of the National Academy of the Sciences of the United States of America, n.d. Web. 22 Aug 2013.

https://www.google.com/#fp=ac5cd14244ff53f4&q=PNAs&safe=off

²¹⁶ "Air Pollution: Indoor.". Earth Journalism Network, 02 Oct 2012. Web. 22 Aug 2013. http://earthjournalism.net/toolkit/?p=30

²¹⁷ Chen, H., MS Goldberg, PJ Villeneuve, and . "A systematic review of the relation between long-term exposure to ambient air pollution and chronic diseases." . U.S. National Library of

tons of CO_2 into the atmosphere each day,²¹⁸ which is why carbon dioxide has reached its highest levels in the past 650,000 years.²¹⁹ Natural carbon sinks, such as forests and untilled soils which absorb and contain CO_2 , are quickly disappearing. This depletion triggers a feedback loop that causes more depletion, and thus higher and higher levels of CO_2 .²²⁰

Several other synthetic toxins pollute the air. Sulfur oxides which cause acid rain²²¹ are largely a product of industrial production,²²² and are known to cause respiratory malfunction and death.²²³ Carbon monoxide, which impairs the body's ability

Medicine, Oct 2008. Web. 22 Aug 2013.

http://www.ncbi.nlm.nih.gov/pubmed/19235364?dopt=Abstract

²¹⁸ Naam, Ramez, "Can we capture all of the world's carbon emissions?". Scientific American,

³¹ Mar 2011. Web. 22 Aug 2013. http://blogs.scientificamerican.com/guest-blog/2011/03/31/can-we-capture-all-of-the-worlds-carbon-emissions/

²¹⁹ Adam, David, "World carbon dioxide levels highest for 650,000 years, says US report." . The Guardian, 12 May 2008. Web. 22 Aug 2013.

http://www.theguardian.com/environment/2008/may/13/carbonemissions.climatechange

²²⁰ "Climate Roulette: Loss of Carbon Sinks & Positive Feedbacks." *Eco Bridge*. N.p., n.d. Web.

²² Aug 2013. http://www.ecobridge.org/climate roulette.html

²²¹ "What is Acid Rain and What Causes It?." *Almanac of Policy Issues*. Environmental

Protection Agency, 06 Aug 2002. Web. 22 Aug 2013.

http://www.policyalmanac.org/environment/archive/acid_rain.shtml

²²² "Sulphur dioxide." . N.p., n.d. Web. 22 Aug 2013.

http://ces.iisc.ernet.in/energy/HC270799/HDL/ENV/enven/vol361.htm

²²³ "Tox Town." *Sulfur Dioxide*. National Library of Medicine, n.d. Web. 22 Aug 2013.

http://toxtown.nlm.nih.gov/text version/chemicals.php?id=29

to deliver oxygen to vital organs,²²⁴ can quickly cause flu-like symptoms and death.²²⁵ The main sources of carbon monoxide are automobiles and industrial facilities.²²⁶

Perhaps the worst problem of all is the disappearance of topsoil - the uppermost layer of fertile dirt, about six inches in depth - that is essential to sustaining terrestrial life.²²⁷ The planet is losing about one percent of topsoil per year,²²⁸ mostly due to largescale agriculture.²²⁹ This figure might seem small, but topsoil worldwide is being depleted at least ten times faster than it can be replaced,²³⁰ since it takes hundreds of

²²⁴ "Urban Air Pollution." *Carbon Monoxide Kills*. N.p., n.d. Web. 22 Aug 2013. http://www.carbonmonoxidekills.com/37/urban air pollution

²²⁵ "Carbon Monoxide." An Introduction to Indoor Air Quality (IAQ). United States

Environmental Protection Agency, n.d. Web. 22 Aug 2013. http://www.epa.gov/iaq/co.html

²²⁶ "Carbon Monoxide (CO)." . Australian Government Department of Sustainability,

Environment, Water, Population and Communities, 2005. Web. 22 Aug 2013.

http://www.environment.gov.au/atmosphere/airquality/publications/carbonmonoxide.html

²²⁷ "Civilization on Six Inches of Topsoil." . Prescott Evening Courier, n.d. Web. 22 Aug 2013. http://news.google.com/newspapers?nid=897&dat=19540223&id=Z69aAAAAIBAJ&sjid=4E8D AAAAIBAJ&pg=3145,2036076

²²⁸ From Dust Bowl to Dust Bowl: Soils are Still Very Much a Frontier of Science. Soil Science Society of America Journal, n.d. Web. 22 Aug 2013.

https://www.agronomy.org/publications/sssaj/articles/75/6/2037

²²⁹ Cox, Craig, Andrew Hug, and Nils Bruzelius. "EXECUTIVE SUMMARY - Page 1." *Losing Ground*. Environmental Working Group, n.d. Web. 22 Aug 2013.

http://www.ewg.org/losingground/report/executive-summary.html

²³⁰ Lang, Susan B., "Slow, insidious' soil erosion threatens human health and welfare as well as the environment, Cornell study asserts." *Cornell Chronicle*. Cornell University, 20 Mar 2006.
Web. 22 Aug 2013. http://www.news.cornell.edu/stories/2006/03/slow-insidious-soil-erosion-threatens-human-health-and-welfare

years to replace a couple inches of topsoil.²³¹ Current projections estimate that the U.S. has about 60 years of topsoil left.²³² Furthermore, the topsoil that remains is 40% degraded - which means that its ability to grow plants is significantly decreased.²³³ This resulting infertility spurs farmers to apply more chemical fertilizers to rejuvenate the soil. One recent study estimated that farmers collectively use about five billion pounds of pesticides per year.²³⁴

Farmers also use increasingly heavy machinery to till, spray, plant, and harvest their fields. The weight of this heavy machinery compacts the soil and thereby reduces aeration, making it harder for soil to breathe. When soil is compacted roots must exert tremendous pressure to penetrate the compressed layer.²³⁵ The high density of compact soil also prevents it from easily absorbing water, which leads to floods and runoff that cause more erosion and flush farm chemicals into nearby water systems.

Water systems themselves are increasingly imperiled. Two million tons of agricultural waste, municipal sewage, and industrial discharge are dumped into the

²³² World Economic Forum, , , and . "What If the World's Soil Runs Out?." *Time World*. Time, 14 Dec 2012. Web. 22 Aug 2013. http://world.time.com/2012/12/14/what-if-the-worlds-soil-runs-out/

http://www.epa.gov/pesticides/pestsales/07pestsales/usage2007.htm

²³¹ "Activity #30: Composition of Topsoil." . Maine Geological Survey, n.d. Web. 22 Aug 2013. http://www.maine.gov/doc/nrimc/mgs/education/lessons/act30.htm

²³³ Ibid.

²³⁴ "2006-2007 Pesticide Market Estimates: Usage." *About Pesticides*. United States Environmental Protection Agency, n.d. Web. 22 Aug 2013.

²³⁵ "Soil Compaction: Causes, Effects, and Control.". University of Minnesota, n.d. Web. 22 Aug2013.

http://www.extension.umn.edu/distribution/cropsystems/components/3115s01.html#section1

world's water supply every single day. As a result, one-fifth of humans lack access to clean drinking water²³⁶ and 1.6 million kids die each year from drinking dirty water.²³⁷

This list could continue ad nauseam to include landfill seepage, leaching from waste lagoons at factory farms,²³⁸ catastrophic oil spills such as the Exxon Valdez wreck which leaked upwards of 30 million gallons of oil into an Alaskan seaway,²³⁹ and the BP Deepwater Horizon explosion which gushed 210 million gallons of oil into an ocean basin.²⁴⁰ The list should also include nuclear meltdowns at Three Mile Island, Chernobyl,

²³⁶ "World Water Quality Facts and Statistics." . Pacific Institute, n.d. Web. 22 Aug 2013. http://www.pacinst.org/wp-content/uploads/2013/02/water_quality_facts_and_stats3.pdf
²³⁷ "Safe Water in Peril: Addressing the Effects of Global Warming on Safe Drinking Water and Sanitation." *Water Facts*. Natural Resource Defense Council, n.d. Web. 22 Aug 2013. http://www.nrdc.org/international/water/peril.pdf

²³⁸ Marks, Robbin, "CESSPOOLS OF SHAME How Factory Farm Lagoons and Sprayfields Threaten Environmental and Public Health.". Natural Resource Defense Council, n.d. Web. 22 Aug 2013. http://www.nrdc.org/water/pollution/cesspools/cesspools.pdf

²³⁹ "How Much Oil Really Spilled From The Exxon Valdez?." On The Media. N.p., 18 Jun 2010. Web. 22 Aug 2013. http://www.onthemedia.org/2010/jun/18/how-much-oil-really-spilled-fromthe-exxon-valdez/transcript/

²⁴⁰ "On Scene Coordinator Report: Deepwater Horizon Oil Spill.". National Response Team, Sep 2011. Web. 22 Aug 2013. http://www.uscg.mil/foia/docs/dwh/fosc_dwh_report.pdf

and the recent Fukushima Daiichi disaster, along with the likely earthquake-causing²⁴¹ and groundwater-contaminating²⁴² practice of hydraulic fracturing in shale gas reservoirs.

In response to the litany of ecological tragedies, Stephen Meyer, a professor at MIT, wrote that

Over the next 100 years or so as many as half of the earth's species, representing a quarter of the planet's genetic stock, will functionally if not completely disappear... Nothing – not national or international laws, global bioreserves, local sustainability schemes, or even 'wildlands' fantasies – can change the current course. The broad path for biological evolution is now set for the next several million years. And in this sense the extinction crisis – the race to save the composition, structure, and organization of biodiversity as it exists today – is over, and we have lost.²⁴³

The main force behind this ecological chaos is the state-sponsored, large-scale, industrial, fossil fuel economy that is equally at home in 'capitalist' and 'communist' countries. As Scott would note, the purpose of all this ecocidal activity is not to damage the environment, but to improve human well-being, as is the professed duty of states. But in

²⁴² Mall, Amy, "Incidents where hydraulic fracturing is a suspected cause of drinking water contamination." . Natural Resource Defense Council, 19 Dec 2011. Web. 22 Aug 2013. http://switchboard.nrdc.org/blogs/amall/incidents_where_hydraulic_frac.html

²⁴³ Meyer, Stephen M., "End of the Wild." ZNet. Z Communications, 12 Apr 2005. Web. 22 Aug 2013. http://www.zcommunications.org/end-of-the-wild-by-stephen-m-meyer.html

²⁴¹ Fountain, Harry, "Add Quakes to Rumblings Over Gas Rush." *New York Times Science*. The New York Times, 12 Dec 2011. Web. 22 Aug 2013.

http://www.nytimes.com/2011/12/13/science/some-blame-hydraulic-fracturing-for-earthquake-epidemic.html?pagewanted=all&_r=0

attempt to increase human security, states have actually increased social risk, leading authors such as Ulrich Beck to argue that we now live in a "risk society" in which environmental risks are a normalized and routine product of the production process, rather than an anomoly.²⁴⁴

Here it is important to note that nothing on this long list of environmental atrocities can be blamed on groups like the hill people of Zomia. That fact is partially what makes Scott's output a key contribution to environmental discourse. Many critics who contribute to environmental scholarship blame 'humans' in general for spoiling the planet's ecology. Even the astute ecocritic John Livingston writes that "What human beings have visited upon this planet may legitimately be seen as an ecospheric holocaust."²⁴⁵ While Livingston's statement does contain a degree of accuracy, it also omits the fact that some human groups have actively resisted contributing to that ecological destruction. Livingston himself imagines the type of undomesticated human group who would be absolved from sharing the blame for the 'ecospheric holocaust.' These undomesticated groups would have a different sense of the word 'culture': "The richer, dynamic usage of the word is a verb: culturing as an activity. Cultures are never fixed, never locked in. They are ceaselessly changing, mutating, shifting to accommodate new circumstances. Cultures are plastic, adaptive, temporary emergences, even more

²⁴⁴ See, Ulrich Beck, <u>Risk Society: Towards a New Modernity</u>, (New York: Sage Publications Ltd., 1992).

²⁴⁵ John A. Livingston, <u>Rogue Primate: An Exploration of Human Domestication</u>, (Ontario: Key Porter Books, 1994) 1.

ephemeral than the species who create them."²⁴⁶ What Livingston's remarks suggest, and what Scott's work demonstrates is that states are the main culprit in this environmental devastation, and that those humans who deliberately resist state forms should be exonerated from blame. As the veteran Earth First! member Christopher Manes puts it,

the biological meltdown is most directly the result of the values fundamental to what we have come to recognize as culture under the regime of technological society: economic growth, 'progress,' property rights, consumerism, religious doctrines about humanity's dominion over nature, technocratic notions about achieving an optimum human existence at the expense of all other life-forms. These ideas have a long lineage, going back perhaps ten thousand years to the rise of urban centers, domestication, and the first political states during the Neolithic revolution, when agriculture first began to displace the hunter-gatherer way of life. They are embedded in our understanding of civilization and the good life; and civilization, as the biological meltdown suggests, seems to require the progressive extirpation of life on this planet through habitat destruction, the production of toxic wastes, ozone depletion, and a thousand other affronts to the environment.²⁴⁷

When assigning responsibility for the planet's biotic degradation it is therefore crucial to distinguish between humans who are the subjects of states and those who are stateless. And it is furthermore important to note that this distinction, though blurry at times,

²⁴⁶ Ibid. 8.

 ²⁴⁷ Christopher Manes, <u>Green Rage: Radical Environmentalism and the Unmaking of Civilization</u>,
 (Little, Brown & Co. Boston, 1990) 29.

entirely hinges upon the human relationship to food. In general, state subjects are leashed to sedentary agriculture while stateless people feature a far less 'legible' – even mobile form of procuring food. Writing in 1864, the famed conservationist George Perkins Marsh wrote that, "with stationary life, or at latest with the pastoral state, man at once commences an almost indiscriminate warfare upon all the forms of animal and vegetable existence around him, and as he advances in civilization, he gradually eradicates or transforms every spontaneous product of the soil he occupies."²⁴⁸

After reviewing the deleterious environmental consequences of the state paradigm, one is prompted to question the viability of civilization and its notions of progress. The standard civilizational tale has a linear dimension that proceeds from most primitive to most advanced, which begins with foragers and gatherer-hunters, then proceeds in succession with pastoral nomadism, shifting cultivation and small-plot horticulture, sedentary fixed-field agriculture, irrigated plow agriculture, and finally 'ascending' to industrialized agriculture.²⁴⁹ But as Scott makes apparently clear, that notion of progress smuggles-in many unfounded assumptions. According to the case Scott presents, there is not so much a linear procession of human progress, but rather parallel ways of inhabiting the earth, one of which features statehood and environmental ruin, while the other resists them. In a passage that clarifies this point, Scott writes that

²⁴⁸ George Perkins Marsh, <u>So Great a Vision: The Conservation Writings of George Perkins</u> <u>Marsh</u>, (Middlebury: Middlebury Bicentennial, 2001) 137.

 ²⁴⁹ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u>
 <u>Asia</u>, (New Haven: Yale University Press, 2009) 187.

In the valley imagination, all these characteristics are earlier stages in a process of social evolution at the apex of which elites perch. Hill peoples are an earlier stage: they are 'pre-' just about everything: pre-padi cultivation, pre-towns, prereligion, preliterate, pre-valley subject. As we have seen at some length, however, the characteristics for which hill peoples are stigmatized are precisely those characteristics that a state-evading people would encourage and perfect in order to avoid surrendering autonomy. The valley imagination has its history wrong. Hill peoples are not pre-anything. In fact, they are better understood as post-irrigated rice, postsedentary, postsubject, and perhaps even postlierate. They represent, in the longue durée, a reactive and purposeful statelessness of peoples who have adapted to a world of states while remaining outside their firm grasp.²⁵⁰

At this point, one possible criticism is that Scott is describing a human anomaly which applies to a smattering of Southeast Asian vagabonds and nobody else. Scott anticipates this criticism, writing that "I have come to see this study of Zomia, or the massif, not so much as a study of hill peoples per se but as a fragment of what might properly be considered a global history of populations trying to avoid, or having been extruded by, the state."²⁵¹ If Scott's study attempted to comprehend the gamut of stateless people it would span volumes. But in case the reader assumes that Scott's argument only pertains to topographies of skyward elevation, he notes that "A complete accounting of state-resistant places would have as many pages devoted to low, wet places – marshes, swamps, fens, bogs, moors, deltas, mangrove coasts, and complex waterways and

²⁵⁰ Ibid. 337.

²⁵¹ Ibid. 328.

archipelagoes – as to high mountain redoubts."²⁵² The lesson to be drawn is that statedefying spaces should not be construed as precise geographic coordinates, but rather as moving targets, or locations that continually stray in relation to the state's power gambits.

Though the hill people of Zomia are the largest example of state-thwarting humans, they are not unique in their defiance of statehood. If Scott's study was stretched to encompass the entire globe it would contain discussions of "Nomads and pastoralists (such as Berbers and Bedouins), hunter-gatherers, Gypsies, vagrants, homeless people, itinerants, runaway slaves, and serfs [who] have always been a thorn in the side of states."²⁵³ A comprehensive study of maroon communities would include "African slaves who had escaped and established communities outside the easy reach of slavers. These communities ranged in size from Palmares in Brazil, with perhaps twenty thousand inhabitants, and Dutch Guiana (Surinam), with that many or more, to smaller settlements of escapees through the Caribbean (Jamaica, Cuba, Mexico, Saint-Domingue), as well as in Florida and on the Virginia-North Carolina border in the Great Dismal Swamp."²⁵⁴ And in case Scott's argument seems worlds away to readers in the United States, that impression can be rebuffed by his claim that "Zomia could be thought of as a Southeast Asian Appalachia."²⁵⁵

²⁵² Ibid. 169.

 ²⁵³ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u>
 <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 1.

 ²⁵⁴ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u>
 <u>Asia</u>, (New Haven: Yale University Press, 2009) 189-190.
 ²⁵⁵ Ibid 14

Initially, one might assume that states regard these peripheral people as a threat because they refuse to be incorporated as a protectorate, if not fully absorbed into the state proper. But according to Scott's overall depiction of fugitive people, "The main, long-run threat of the ungoverned periphery... was that it represented a constant temptation, a constant alternative to life within the state."²⁵⁶ The state can neither comprehend nor address those who outright refuse to align themselves with the broader 'fiscal population.'²⁵⁷

This inability of states to comprehend those who reject its supervision is just one of many traits shared by all states throughout history. In surveying an extensive, though not exhaustive history of states, Scott detects a kind of logic lodged in their founding and growth. Much of that logic revolves around the institution of property. Scott argues that "the very concept of the modern state presupposes a vastly simplified and uniform property regime that is legible and hence manipulable from the center."²⁵⁸ Throughout history states have used the idea of property to persistently annex what were formerly regarded as free gifts of nature, and have thereby incorporated "forests, game, wasteland, prairie, subsurface minerals, water and watercourses, air rights (rights to the air above buildings or surface area), breathable air, and even genetic sequences, into a property regime."²⁵⁹ Following this transformation of nature's bounty into property, states developed cadastral maps that served as a comprehensive register of all landholdings.

²⁵⁶ Ibid. 6.

²⁵⁷ Ibid. 121.

 ²⁵⁸ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u> <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 35.
 ²⁵⁹ Ibid. 39.

According to Scott, "the driving logic behind the map is to create a manageable and reliable format for taxation".²⁶⁰ This logic is exemplified by Thomas Jefferson's highmodernist idea of segmenting all of the United States that stretched west of the Ohio River into square plots of land that measured ten miles by ten miles, and then requiring settlers to deed the land thus sectioned.²⁶¹ Jefferson's goal of imprinting the land with a grid of homogenized property units is emblematic of a state-maker's fantasy. Apportioning land into cookie-cutter parcels greatly eases the task of commoditization and taxation: "Land could be registered and titled from a distance by someone who possessed virtually no local knowledge."²⁶² Another example of this detached 'expertise' that also demonstrates the political promiscuity of high-modernist ideology is illustrated by the case of Soviet collective farms, which were invented in a Chicago hotel room.²⁶³ As Scott notes, "In dictatorial settings where there is no effective way to assert another reality, fictitious facts-on-paper can often be made eventually to prevail on the ground, because it is on behalf of such pieces of paper that police and army are deployed... These paper records are the operative facts in a court of law, in an administrative dossier, and before most functionaries."²⁶⁴

Nowadays states can insure the uniformity (and hence legibility) of farming practices using more subtle methods: "standardization is typically linked to public policy in the form of tax incentives, loans, price supports, marketing subsidies, and,

²⁶⁰ Ibid. 36.

²⁶¹ Ibid. 50.

²⁶² Ibid. 51.

²⁶³ Ibid. 271.

²⁶⁴ Ibid. 83.

significantly, handicaps imposed on enterprises that do not fit the schematization, which systematically operate to nudge reality toward the grid of its observations.²⁶⁵ And the more that reality reflects the grid of state observation, the more power is consolidated in the centralizing institutions which enforce that grid.²⁶⁶

Without a doubt, the state has sought to shrinkwrap society with its utilitarian logic that produces widespread uniformity.²⁶⁷ But even though Scott tends to focus on centralized political institutions, he is careful to note that capitalism is perhaps a more pernicious force than institutions of government. Anticipating that some readers might mistake him to be formulating an argument against state power that instead favors free-enterprise capitalism, Scott explicitly argues that

large-scale capitalism is just as much an agency of homogenization, uniformity, grids, and heroic simplification as the state is, with the difference being that, for capitalists, simplification must pay. A market necessarily reduces quality to quantity via the price mechanism and promotes standardization; in markets, money talks, not people. Today, global capitalism is perhaps the most powerful force for homogenization, whereas the state may in some instances be the defender of local difference and variety.²⁶⁸

But as the main arbiter of property relations, the state reinforces a dynamic that enables the commoditization of the environment, and thereby conspires with capital to maintain a

²⁶⁵ Ibid. 300.

²⁶⁶ Ibid. 286.

²⁶⁷ Ibid. 309.

 ²⁶⁸ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u>
 <u>Asia</u>, (New Haven: Yale University Press, 2009) 8.

paradigm wherein ecological concerns are regularly subordinated to economic concerns. The state and capitalism thus combine to promote a system which profoundly fails to understand that "the economy is 'a sub-system of a finite and nongrowing eco-system,' whose carrying capacity and interactions it must respect as a condition of its persistence".²⁶⁹

Insights such as that, which should be obvious to the point of cliché, goad readers into rethinking the relationship between the state of nature and the nature of the state. The ways in which sessile states have routinely ravaged the natural world attest to the fact that states perceive the environment as little more than dead matter, or raw material that is only utile for enhancing state power. Indeed, Scott's work conclusively demonstrates the ways in which fixed-field grain agriculture in Southeast Asia functioned as the state's foundation of power.²⁷⁰ As a matter of course, sedentary agriculture inexorably gives rise to a regime of land titles and property rights – not to mention the ensuing institutions of patriarchal families and primogeniture - - forces which colonize the future with inequalities.

The hill people of Zomia, like all fugitive groups, are absolutely dependent upon the existence of a 'commons' in order to maintain subsistence levels. Large tracts of commons facilitate their mobility and foster their egalitarian relationships.²⁷¹ Equal access to vast sweeps of land acts as a rampart against the emergence of fixed, assigned,

 ²⁶⁹ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u> <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 351.
 ²⁷⁰ Ibid. 286.

 ²⁷¹ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u>
 <u>Asia</u>, (New Haven: Yale University Press, 2009) 278.

inheritable property that inevitably produces permanent class formations and hierarchies of power.²⁷² Both foraging and swiddening "are virtually unthinkable without an open, common-property frontier. Its disappearance is a mortal blow to autonomy."²⁷³ In the hills of Zomia land is a shared resource that provides an aegis against state-making. But the last century has witnessed an accelerated expansion of individual freehold tenure along with the state's allocation of land rights, which Scott calls "the world's last great enclosure."²⁷⁴ Scott perceives in this trend an "immanent logic" that involves "the complete elimination of nonstate spaces."²⁷⁵

Not only is enclosure detrimental to political autonomy, but the modern farming techniques to which that enclosed land is subjected have proven to be perilous: "Modern, industrial, scientific farming, which is characterized by monocropping, mechanization, hybrids, the use of fertilizers and pesticides, and capital intensiveness, has brought about a level of standardization into agriculture that is without historical precedent. Far beyond mere monocropping on the model of scientific forestry explored earlier, this simplification has entailed a genetic narrowing fraught with consequences that we are only beginning to comprehend."²⁷⁶ One of those consequences is the creation of domesticated crops that depend upon human intervention to guarantee their survival.

²⁷² Ibid.

²⁷³ Ibid. 279.

²⁷⁴ Ibid. 282.

²⁷⁵ Ibid. 10-11.

 ²⁷⁶ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u>
 <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 266.

Humans must routinely clear swaths, burn underbrush, break the soil, weed, prune, and manure in order to shield their crops against natural selection.²⁷⁷

Perhaps the most important lesson to be learned from Scott's work is that all states exhibit a certain set of behaviors which are ultimately incompatible with basic ecological principles. And as his research indicates, modern nation states are especially mismated with notions of environmental sustainability. Scott writes that

Only the modern state, in both its colonial and independent guises, has had the resources to realize a project of rule that was a mere glint in the eye of its precolonial ancestor: namely to bring nonstate spaces and people to heel... Governments, whether colonial or independent, communist or neoliberal, populist or authoritarian, have embraced it fully. The headlong pursuit of this end by regimes otherwise starkly different suggests that such projects of administrative, economic, and cultural standardization are hard-wired into the architecture of the modern state itself.²⁷⁸

At times Scott is wont to claim that states are doomed to induce ecological disaster: "the origins of these failures can be traced to a deeper level; these were, in other words, systemic failures and would have occurred under the best assumptions about administrative efficiency and probity."²⁷⁹ If one follows that train of thought, then the goal of creating an eco-friendly state seems naïve. That is, states do not initiate

²⁷⁷ Ibid. 264-265.

 ²⁷⁸ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u>
 <u>Asia</u>, (New Haven: Yale University Press, 2009) 4.

 ²⁷⁹ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u>
 <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 263.

environmental catastrophe because they lack reliable information, or due to amendable administrative oversights. Put metaphorically, the problem is bone-deep, and therefore cannot be transcended by a change of wardrobe. Scott bemoans the "the systemic, cyclopean shortsightedness of high-modernist agriculture that courts certain forms of failure. Its rigorous attention to productionist goals casts into relative obscurity all the outcomes lying outside the immediate relationship between farm inputs and yields. This means that both long-term outcomes (soil structure, water quality, land-tenure relations) and third-party effects, or what welfare economists call 'externalities,' receive little attention until they begin to affect production."²⁸⁰ Productionist goals are also tempered by temporal ambitions that blind administrators to the long-run consequences of their actions. Short-term profit motives, often calibrated to insure 'quarterly earnings,' function to veil second- or third-order consequences, not to mention the synergistic effects of multiple actions.²⁸¹

Scott's critique of that myopia is at the heart of his broader argument. By his own account, Scott is ultimately "making a case for the resilience of both social and natural diversity and a strong case about the limits... of what we are likely to know about complex, functioning order".²⁸² By the accounts of others, his underlying purpose is a "sobering critique of high modernism's assault on local knowledge and indigenous agricultural systems... Scott builds a generally cogent case for [those systems'] social

²⁸⁰ Ibid. 264.

²⁸¹ Ibid. 344.

²⁸² Ibid. 7.

resonance and ecological sustainability.²⁸³ He "is also skeptical of institutions that are highly specialized and rigid; Scott has a strong preference for diversity in natural and social systems because of their adaptability and long-term durability.²⁸⁴

To repackage Scott's conclusions into a general formula would ignore his many warnings about the dangers of applying one-size-fits-all policies. Nevertheless, Scott encapsulates the lessons gleaned from his earlier research into four moderate maxims: When aiming to make improvements, take small steps instead of imposing a new scheme all at once; when implementing plans, favor reversibility in order to avoid permanent damage; plan on surprises that will kink the most prospicient designs; and leave plenty of leeway for everyday human inventiveness to contribute clever improvements.²⁸⁵ Scott claims to be making a case for institutions that are multifunctional, fictile, diverse, nimbly adaptable, and powerfully shaped by *metis*.²⁸⁶ He concludes that "there is something to the classical anarchist claim – that the state, with its positive law and central institutions, undermines individuals' capacities for autonomous self-governance – that might apply to the planning grids of high modernism as well. Their own institutional legacy may be frail and evanescent, but they may impoverish the local wellsprings of economic, social, and cultural self-expression."²⁸⁷

²⁸³ Michael Adas, "Review: Seeing Like a State," Journal of Social History, 33.4 (2000): 962.

²⁸⁴ Andrew R. Willard "Book Review: Seeing Like a State," Policy Sciences, 33 (2000): 113.

 ²⁸⁵ James C. Scott, <u>Seeing Like a State: How Certain Schemes to Improve the Human Condition</u> <u>Have Failed</u>, (New Haven: Yale University Press, 1998) 345.
 ²⁸⁶ Ibid. 353.

²⁸⁷ Ibid 349

Concerned citizens often struggle to answer the question of how states can be made sustainable. Scott's inquiry prompts us to reconsider the assumptions in that question and ask whether states have *any* place in a sustainable world. Perhaps it is not merely a coincidence that the most devastating anthropogenic environmental impacts have occurred since states emerged as political/geographical entities. If Scott's instincts are correct in supposing that some inherent property of states makes them prone to ecological degradation, then further critique of state optics is urgently needed – especially since almost all of the earth's land is now claimed by states.

Another virtue of Scott's work is that it prompts readers to shift their conversation and focus on tactics. His research prods reviewers to examine the state's tactics of control and then to imagine counter-tactics that obstruct the state's stratagems. Rather than confining his work to critique alone, Scott's research uncovers a panoply of strategies that undermine state growth and fortify against state depredations. However, Scott realizes that the tactics employed by the hill people of Zomia will strike most readers as impossible in

an era in which virtually the entire globe is 'administered space' and the periphery is not much more than a folkloric remnant... In the contemporary world, the future of our freedom lies in the daunting task of taming Leviathan, not evading it. Living in a fully occupied world, one with increasingly standardized institutional modules, the two most hegemonic of which are the North Atlantic modules of individual freehold property and the nation-state, we struggle against the enormous disparities in wealth and power spawned by the former and the ever more intrusive regulation of our interdependent lives by the latter.²⁸⁸

That somewhat deflating and defeatist conclusion leaves us in place where we are left to say, like Ansel Adams, "It is horrifying that we have to fight our own government to save our environment."²⁸⁹ But even though Scott's conclusion is persuasive, he fails to entertain the idea that Leviathan can best be tamed by evasive acts which are less dramatic than those utilized by hill peoples, but nevertheless draw inspiration from their playbook. One could easily imagine a compendium of evasive strategies tailored to urban and suburban environs that make strides towards reducing one's legibility, increasing agronomic and economic autonomy, and developing small-scale political forms that act as a centrifugal force which pulls power away from centralized institutions.

To be sure, critics will argue that the state-evading tactics Scott describes are not practical or adoptable. This argument is peculiar given that such practices were adopted by real people for practical purposes with remarkably successful results. And if Scott's analysis is correct, then prolonged reliance on unsustainable states is the most impractical solution. Furthermore, the fact that these political tactics are no longer regarded as viable options is itself an issue of great concern, for it reveals two important conclusions: One is that the state has transformed itself into a presence that has sufficient power to enforce the exclusion of certain existential possibilities; that is, it makes certain ways of living

²⁸⁸ James C. Scott, <u>The Art of Not Being Governed: An Anarchist History of Upland Southeast</u> <u>Asia</u>, (New Haven: Yale University Press, 2009) 324.

²⁸⁹ Lynn Jacobs, Waste of the West: Public Lands Ranching, (Lynn Jacobs, 1992) 439.

nearly impossible – particularly ways of living that are ecologically sustainable.

Secondly, it has created populations that cannot imagine life outside the state. Perhaps the most dismaying fact about the world is that most people will regard Scott's work as a purely academic exercise with no connection to 'real life.'

BIBLIOGRAPHY

- Adams, John. The Works of John Adams, Second President of the United States, Volume
 - 2. Cambridge: Cambridge University Press. 2011.
- Adas, Michael . "Review: Seeing Like a State." *Journal of Social History*. 33.4 (2000): 959-963.

Agrawal, Arun. "Book Review: The Art of Not Being Governed." *Environment*. July/August. (2010): 53. Web. 27 Oct. 2011. http://www.environmentmagazine.org/Archives/Back Issues/July-August

2010/books-of-note.html

- Beck, Ulrich. *Risk Society: Towards a New Modernity*. New York: Sage Publications Ltd. 1992.
- Bressler, Michael. "Book Review: Seeing Like A State." *Governance*. 13.3 (2001): 409-438.
- Emerson, Ralph Waldo. Selected Writings of Ralph Waldo Emerson. New York: Signet Classic. 1965.
- Estabrook, Barry. Tomatoland: How Modern Industrial Agriculture Destroyed Our most Alluring Fruit. Kansas City: Andrews McMeel Publishing. 2011

- Farrell, Henry. "The State of Statelessness." *The American Interest*. Winter (January/February) (2011): 107-113.
- Foucault, Michel. *The History of Sexuality Volume 1, An Introduction*. New York: Vintage. 1976.
- Heidegger, Martin. *Basic Writings: Second Edition, Revised and Expanded*. New York: Harper Perennial Modern Classics. 2008.

Hobbes, Thomas. Leviathan. Indianapolis: Hackett. 1994.

- Lehman, F.K. "Burma: Kayah Society as a Function of the Shan-Burma-Karen Context," *Contemporary Change in Traditional Societies*, ed. Julian Steward. Urbana: University of Illinois Press. 1967.
- Livingston, John A. *Rogue Primate: An Exploration of Human Domestication*. Ontario: Key Porter Books. 1994.

Kant, Immanuel. Critique of Pure Reason. Boston: Palgrave Macmillon. 2007.

- Kotke, Wm. H., *The Final Empire: The Collapse of Civilization, the Seed of the Future*. Portland: Arrow Point Press. 1993.
- Manes, Christopher. Green Rage: Radical Environmentalism and the Unmaking of Civilization. Little, Brown & Co. Boston. 1990.
- Marsh, George Perkins. So Great a Vision: The Conservation Writings of George Perkins Marsh. Middlebury: Middlebury Bicentennial. 2001.
- Mason, Richard O. "Review of Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed, by James C. Scott." *The Information Society*. 16 (2000): 233-239.

Rousseau, Jean-Jacques. The Basic Political Writings. Indianapolis: Hackett. 1988.

- Salt, David and Walker, Brian. *Resilience Thinking: Sustaining Ecosystems and People in a Changing World*. Washington: Island Press. 2006.
- Scott, James C. The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia. New Haven: Yale University Press. 2009.
- Scott, James C. Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed. New Haven: Yale University Press. 1998.
- Scott, James C. Two Cheers for Anarchism: Six Easy Pieces on Autonomy, Dignity, and Meaningful Work and Play. Princeton: Princeton University Press. 2012.
- Thompson, Thomas J. "Book Review, The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia, by James C. Scott." *The Independent Review*. Summer (2010): 125-128.
- Willard, Andrew R. "Book Review: Seeing Like a State." *Policy Sciences*. 33 (2000): 107-115.
- Yoffee, Norman. "The Evolution of Simplicity." *Current Anthropology*. 42.5 (2001): 767-769.
- Zerzan, John. *Against Civilization: Readings and Reflections: Enlarged Edition*. ed. John Zerzan. Los Angeles: Feral House. 2005.



Thesis and Dissertation Services