

Managing the Empire's Wealth: Environmental Thought during Spain's Golden Age, 1492-1618

By

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### *Abstract*

During the sixteenth century, or Spain's so-called "Golden Age," Spain's understanding of wealth, resource management, and cosmology underwent massive evolution in the face of gaining an empire in the Americas. Before the conquest of the Americas, resource scarcity and the need for careful resource management defined Spanish environmental thought. Afterward, the idea that the Americas could provide infinite wealth took precedence. But as the century progressed and the empire declined, people from different parts of Spanish society--municipal councilmen, conquistadors, royal cosmographers, and royal reformers--reconciled these two ideas into one line of thought: abundant wealth could be harmful if not managed correctly. This dissertation situates Spanish economic thought within the broader discussion on European economic history, the history of science, and environmental thought.

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## INTRODUCTION

### Early Modern Spanish Discourses on Wealth and Land Management

*“Pecunia pecuniam non parit: money is sterile”*- Cristóbal de Villalón (1546)<sup>1</sup>

Cristóbal de Villalón, a Castilian economist and member of the School of Salamanca, was preoccupied with the nature of money and the growth of a credit economy in early modern Spain. The literal translation of the Latin phrase, *“Pecunia pecuniam non parit,”* is roughly: “money does not allow more money to flower.” The actual translation, noted above, is far more evocative and points to the revolution in economic thought that was happening in Spain during the sixteenth century. The burgeoning credit economy, spurred on by Spain’s imperial successes and the growth of a merchant-class in Spain itself, was troubling to Villalón. From his perspective, commerce had always been based on the transaction of tangible goods and people had traded items that served some sort of practical purpose. For example, one could trade a bushel of wheat, a foodstuff necessary for life, for wool sweaters, items that would keep the body warm. But with the advent of paper money and credit, the value of a good became more abstract. Villalón rejected this vision of the future, arguing that money in itself had no intrinsic value and that it could not lead one to prosperity. Thus, an economy based on credit and paper money was destined to fail.

Over the course of the sixteenth and early seventeenth centuries, the Iberian kingdoms of Castile and Aragon entered a so-called “Golden Age” that witnessed Iberian expansion into the

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<sup>1</sup>Cristóbal de Villalón, *Provechoso tratado de cambios y contrataciones de mercaderes y reprovación de usura* (Madrid: 1546), f.1, page 39; in Michael Thomas D’Emic, *Justice in the Marketplace in Early Modern Spain: Saravia, Villalón and the Religious Origins of Economic Analysis* (2014), 19.

Americas and beyond. While this period of Habsburg dominance<sup>2</sup> created lasting social, economic, and political upheaval on both sides of the Atlantic, the arrival of empire also affected an epistemological crisis in Europe generally and in Iberia in particular. Two central concerns defined this crisis: the need to reconcile medieval European cosmology with the “discovery” of the Americas, and the breakdown of the medieval socio-political order caused by Spain’s sudden rise to power and the influx of new wealth brought from the Americas. This epistemological crisis defined early modern Spain’s Golden Age and also underlined the peculiar difficulties Spain would encounter as it constructed an Atlantic empire.

Donald Worster has argued that the Eurasian encounter with the Americas in 1500 ushered in the modern era, an era defined by an “unprecedented natural abundance” that fundamentally altered humanity’s material living conditions. Christopher Columbus sought a quicker way to wealth and, in the process, to transcend Europe’s centuries-long battle with its own ecological limits.<sup>3</sup> When the twentieth century arrived, Worster argues, humanity believed that this era of abundance was coming to an end.<sup>4</sup>

As early modern Spain’s empire grew and as its society learned more about the Americas, Spanish society’s fundamental understanding of wealth and management shifted to reflect altered realities. Medieval Castile was an economic and political backwater of Europe. By the end of the sixteenth century, it was the leading power in Europe. Yet somehow the socio-economic situation in the kingdom actually began to *deteriorate* during the Golden Age, leading many contemporary economists, religious leaders, and high-ranking Crown officials to examine

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<sup>2</sup>From the fourteenth century through the First World War, the House of Habsburg dominated European politics through a series of dynastic marriages. Charles V (1500-1558) would eventually inherit the Iberian kingdoms of Castile and Aragon, the Low Countries, the Franche-Comté, the kingdoms of Naples, Sicily, and Sardinia, and the Holy Roman Empire.

<sup>3</sup>Donald Worster, *Shrinking the Earth: The Rise and Decline of American Abundance* (New York: Oxford University Press, 2016), 14.

<sup>4</sup>*Ibid.*, 6.

how such a thing could be possible. But this conversation was not restricted solely to intellectuals at the top of early modern Spanish society. Indeed, municipal councils, royal forest managers, conquistadors, theologians, economists, and royal reformers were all having conversations about the origins of wealth, how that wealth should be managed, and how that wealth then affected society and the *república*<sup>5</sup> at large. As Kenneth J. Howell argues, early modern peoples of many stripes were all wrestling with “dramatic changes in their conceptions of the universe.”<sup>6</sup>

Economic historians of the early modern period have detailed the impact that the conquest of the Americas had on European society at large.<sup>7</sup> The arrival of massive amounts of American gold and silver in Europe during the sixteenth century caused what economic historians call the “Price Revolution,” a roughly two century period when the price of goods rose sharply and inflation wrecked European economies. From the 1520s to 1540s, there was increased commercial traffic to and from the Indies that coincided with a population expansion in Castile and Aragon. The merchant-class, who represented around 3-5% of the total population during the sixteenth century, benefitted most from this time of rapid expansion. But as mid-century dawned, prices quadrupled while salaries remained stagnant. Agricultural production declined and foreign merchants siphoned Spanish wealth off to their own homelands.<sup>8</sup> As early

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<sup>5</sup>Early modern Spain’s political reformers and theorists often referred to their polity as the *república* or as *España*. To avoid an anachronistic use of the term “Spain,” this dissertation uses *república* in most instances. When “Spain” or “Spaniard” is employed here, it refers to the territorial state controlled by the Spanish Habsburgs in the early modern period and the people who lived there, not the modern nation-state and the associated connotations that come with being a modern nation-state.

<sup>6</sup>Kenneth J. Howell, *God’s Two Books: Copernican Cosmology and Biblical Interpretation in Early Modern Science* (Notre Dame, Ind: University of Notre Dame Press, 2002), 1.

<sup>7</sup>This is a vast historiography that I have only begun to examine. For a concise introduction to medieval and early modern European economic history, see Barry Gordon, *Economic Analysis Before Adam Smith: Hesiod to Lessius* (New York: Barnes & Noble Books, 1975); Alejandro Antonio Chafuen, *Faith and Liberty: The Economic Thought of the Late Scholastics* (Lanham, Md: Lexington Books, 2003); Odd Langholm, *The Legacy of Scholasticism in Economic Thought: Antecedents of Choice and Power* (Cambridge, England: Cambridge University Press, 1998).

<sup>8</sup>D’Emic, 2-3.

as 1517, Nicolas Copernicus was aware of the deleterious effect of New World precious metals.<sup>9</sup> But it would not be until the latter half of the sixteenth century that Spanish intellectuals would fully engage the economic and moral problems associated with precious metals.

In particular, early modern Spanish historians have emphasized two schools of thought or movements that emerged in response to the problem of prices: the School of Salamanca and the *arbitristas* (reformers). Members of the School of Salamanca and the *arbitristas* focused on marketplace morality, the impact of American riches on domestic industry, and the fluctuations in Spain's imperial fortunes. These men, often high-ranking court officials or clergymen, sought moral solutions to economic problems and wove Christian teachings into their analyses. Their work synthesized a number of modern academic disciplines, including geography, history, economics, and theology. The School of Salamanca was dedicated to the revival of Thomism and the scholastic method. They shifted the focus of theology and philosophy from metaphysics to everyday concerns.<sup>10</sup> Thus, Biblical commentators were intent on "expounding the literal, historical sense" in the Bible and then using that information to explain present-day phenomena.<sup>11</sup> The School of Salamanca and the *arbitristas* argued that the downturn in Spain's imperial fortunes emerged from the Spain's overreliance on precious metals as the basis of the kingdom's wealth. Their solution was to put mercantilist protection measures in place and to support domestic agriculture and industry.

As the sixteenth century closed—so the dominant narrative goes—early modern Spain's intellectuals were solely responsible for new economic theories to explain and combat the dramatic changes affecting Europe. But while prominent economic theorists such as Francisco de

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<sup>9</sup>Worster, *Shrinking the Earth*, 29.

<sup>10</sup>D'Emic, xv, xxii, and 4.

<sup>11</sup>Howell, 33; and Pierre Vilar, *Crecimiento y desarrollo: economía e historia, reflexiones sobre el caso español* (Barcelona: Ediciones Ariel, 1964), 140.



Vitoria and Lope de Deça revolutionized early modern economic thought, the essential ideas of that debate were already being formed in different sectors of Spanish society throughout the sixteenth century. This dissertation argues that early modern Spanish society offered a variety of responses to the question of wealth and society and that the intellectual efforts of the late-sixteenth century were the culmination of these myriad responses. Early modern Spaniards were analyzing the nature of the world, but with different lenses and for different reasons. They were not always interacting with the intellectual authorities of the age. People like Hernán Cortés or Christopher Columbus, for example, were not necessarily reading economic or cosmological texts in order to make a decision on a new settlement. Nevertheless, they were still making observations and attempting to make sense of the world for practical, political purposes that reflected their own peculiar circumstances.

To understand how Spaniards' understanding of the economy evolved throughout the sixteenth-century, this dissertation focuses on how they discussed and imagined wealth and land management. Admittedly, wealth can be a problematic and vague lens of analysis with which to analyze early modern Spanish thought, but it is also the most crucial lens. Whether one looks at farming in Iberia, the foundation of cities in Mexico, or the cataloguing of plants and animals in the Americas, all of the people involved in these endeavors were thinking about wealth and humanity's relationship with nature. This dissertation begins its analysis by examining municipal conservation regimes in Iberia itself.

Medieval Spanish villages viewed their relationship with nature through the lens of scarcity and the well-being of the community. The municipality was an important and elementary unit of political organization that encouraged a specific set of beliefs that would reoccur throughout early modern Spanish economic discourse. Municipal forest conservation

ordinances reflected the belief that, without the steady hand of local government, common people could not be trusted to properly manage scarce, vital forest resources. Furthermore, municipal councils put laws into place to punish wrongdoers and to chastise them in the eyes of the community. The message of these ordinances was clear: the real harm that came from the misuse of forest resources was the harm brought to the community. Particularly, the southern Iberian Peninsula's harsh, semi-arid environment placed certain limits on Spaniards' ability to provide food for themselves. Forests (*montes*) and pastures<sup>12</sup> were contested grounds, where the interests of common people, the merchant class, and the ruling municipal councilors often came into conflict. Furthermore, the Crown had an interest in the same forest resources for its Mediterranean territories, bringing in their own forest guardians to monitor forest usage. Thus, early modern Spaniards were already contending with imperial problems long before American gold threw their world into disorder. As the sixteenth century progressed and imperial crises mounted, the protection of Spain's forests and pastures morphed into the veneration of agriculture as an ideal in the minds of Spain's intellectuals. As Castile and Aragon expanded into the Americas, it would be up to the conquistadors and the first generation of imperial governors to found cities and to reconcile medieval conceptions of wealth with what they observed in the Americas.

The image of early modern Spanish society presented above—a preoccupation with managing limited resources and the moral implications therein—is seemingly at odds with the popular conception of the empire's rapacious activities in the Americas. Conquistadors were often common foot-soldiers from lower-class, agrarian economic background. The older conquistadors were often veterans of the Reconquista. A variety of factors inspired them to leave

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<sup>12</sup>Montes were woodlands. They were often grouped together with pastures under the designation *baldío*, land that was considered crown lands that could be "usurped into the private domain." See David E. Vassberg, *Land and Society in Golden Age Castile* (Cambridge: Cambridge University Press, 1984), 7-8.

for the Americas. Boredom, lack of employment, and frequent harvest failures motivated men to go to the Americas.<sup>13</sup> But while conquistadors were often driven by individual greed, they and the colonial governors of the New World shared with their Peninsular counterparts concerns over how to manage wealth in the most effective way. But whereas scarcity shaped Peninsular discourse on economic policy, the ideas of abundance and potentially unlimited wealth defined how Spaniards governed the Americas early on. The most important question for the Spanish leadership in the Americas was: how a government could wrap its mind around potentially infinite wealth and, more importantly, how could it manage said wealth? The conquistadors and colonial governors answered this question by opting for the familiar. Upon landing in an American territory, their first course of action was to found a city, either from scratch—Veracruz, for example—or by building on top of an existing indigenous city—Tenochtitlan or Cuzco. While the cities may not have had much actual power at first, their founding symbolized the early colonial regime's dependence on the cultural and political legitimacy that cities could bring. That said, the early colonial governors were inefficient and corrupt. The Crown intervened, promulgating several decrees that sought to protect indigenous peoples from abuse and to maximize the output of American mines. While the Crown couched their efforts to protect indigenous people in the language of human decency, the Crown used a familiar term—"conservation"—to describe those efforts. This action on the part of the Crown foreshadowed the massive bureaucratic efforts that would characterize the mid-sixteenth century.

An ever-growing Spanish bureaucracy arose in the mid-sixteenth century to grapple with the problem of managing the New World and its resources. But as the Spaniards used their conventional intellectual and organizational structures to understand the New World, they also

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<sup>13</sup>Carl Ortwin Sauer, *The Early Spanish Main* (Berkeley: University of California Press, 1966), 70 and 148.

lacked a clear grasp of the “radical otherness of the American lands and people.”<sup>14</sup> The desire to transform the distant and the exotic into the knowable spawned massive projects like the *relaciones geográficas*. These surveys fulfilled the function of describing and quantifying the contents of the empire but also pointed to the main tension of the empire in the second half of the sixteenth century: Spain had great wealth at its fingertips but its domestic socioeconomic situation was declining. In the face of a corrupt colonial bureaucracy and burgeoning economic crises, the Crown once again ruminated on the question of wealth. With the help of the geographic and demographic knowledge the *relaciones* provided, the Crown sought the ability to gauge the empire’s resources accurately. The desire to make the unknown known and to quantify the exotic represented a shift in the overall economic philosophy of the empire: the resources of the Americas might very well be infinite and provide shallow, short-term economic benefits to the kingdom, but they would not increase the kingdom’s fortunes in a sustainable, healthy fashion if they were not managed correctly. As the sixteenth century came to an end, gold and silver came to dominate the socio-economic discourse of the kingdom’s leading scholars. A new debate would then emerge from the management and use of precious metals, with discourses surrounding agriculture, the community, and conservation all emerging as possible alternatives to a reliance on precious metals.

By the early seventeenth century, the early modern Spanish conceptions of wealth and management had come full circle. Reformers, or *arbitristas*, located the source of Spain’s weaknesses in its New World possessions. Specifically, they pointed to the overreliance on precious metals as the basis of the economy and to the rise of a credit economy. These new economic ideas, in the minds of the *arbitristas*, were failures because they represented forms of

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<sup>14</sup>Stephen Greenblatt, *Marvelous Possessions: The Wonder of the New World* (Chicago: University of Chicago Press, 1991), 54.

wealth antithetical to Christian, communal values. The answer would be to channel the wealth of the empire into domestic development, to renew a focus on agriculture, and to curtail the merchant-class as much as possible. Thus, the *arbitristas* formulated the synthesis of the medieval and post-1492 conception of wealth and management: while the wealth of the empire was indeed infinite, it had the ability to harm if it was not properly managed. The evolution of early modern Spanish economic discourse during its Golden Age reveals the underlying logic of Spain's political and economic institutions, from municipalities and the Council of the Indies, to the Crown itself.

This dissertation dialogues heavily with both environmental and economic history. Over the course of constructing this project, I have found that there is often a fine line separating the two disciplines from one another. The central concerns of any economic historian of early modern European history—the origins of capitalism, the rise of certain modes of production and the decline of others in the face of global imperialism—are concerns shared with environmental historians. Early modern peoples' economic and cultural beliefs had important ramifications for their attitudes toward nature. Just as the Spanish empire eventually embraced a protectionist, mercantilist economic system, their environmental discourses stressed the abundance and limits of nature. I mention environmental and economic history in particular because they can help to solve a problem any historian of the Spanish empire must face: how to understand the internal logic of a socioeconomic order built on the brutalization of indigenous peoples and on environmentally harmful extractive economic practices such as mining and plantation agriculture.

*Environmental Management or Agrarian Plundering? An Alternative to Decline*

Donald Worster and J.R. McNeill have singled out three general types of environmental history. First, there is material environmental history, which analyzes how environmental change affects human societies and emphasizes technology and economics. Second, cultural/intellectual histories deal in representations of nature and what these representations reveal about past societies. Finally, political environmental history looks at state policy and the natural world.<sup>15</sup> This dissertation interacts with all three of these areas, but it emphasizes cultural/intellectual environmental history more than anything else. An excellent example of the cultural/intellectual approach to environmental history is Jorge Cañizares-Esguerra's *Nature, Empire, and Nation: Explorations of the History of Science in the Iberian World*.<sup>16</sup> Cañizares-Esguerra neatly links the development of Spain as both empire and nation-state with its encounter of "nature" in the Americas. It deals in all three areas of the McNeill/Worster environmental history paradigm: it discusses scientific discovery and changing economic trends in relation to empire and it links evolving early modern Spanish cultural perceptions of nature with the Spanish state's growing bureaucratic practices. In addition to these accomplishments, however, Cañizares-Esguerra manages to tackle imperialism, mercantilism, and the exploitation of natural resources skewed toward environmental determinism or a declensionist narrative. Avoiding the pitfalls of environmental determinism and declensionism is one of the primary goals of this dissertation.

Environmental determinism in early modern Spanish studies has its roots in Fernand Braudel's seminal 1949 work, *The Mediterranean in the Age of Philip II*. In that work, Braudel divided history into "geographical time, social time, and individual time." Geographic time was a history whose passage was "almost imperceptible, that of man in his relationship to the

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<sup>15</sup>J.R. McNeill, "Observations on the Nature and Culture of Environmental History," *History and Theory* (December, 2003), 6. Also, see Donald Worster, "Transformations of the Earth: Toward an Agroecological Perspective in History," *Journal of American History* 76, no. 4 (1990).

<sup>16</sup>Jorge Cañizares-Esguerra, *Nature, Empire, and Nation: Explorations of the History of Science in the Iberian World* (Stanford, Calif: Stanford University Press, 2006).

environment.” The other two forms of time, social and individual, operate within geographic time and follow its lead.<sup>17</sup> In effect, they were subordinates of geographic time. The Mediterranean, in the form of geological processes and climate, determined the destinies of the peoples living there. Humanity and the environment were two independent historical actors whose interaction was based around environmental determinism. For historians of the Mediterranean, this determinism eventually morphed into a narrative of environmental mismanagement.<sup>18</sup>

There is sometimes an inherent tension in environmental histories: humanity is a poor manager that inevitably destroys the natural world, but humanity is also a prisoner of that environment. My dissertation demonstrates that early modern Spaniards across a variety of occupations and social groups were thinking about management and how to achieve balance between humanity’s needs and nature’s ability to satisfy those needs. As Joachim Radkau argues, “all of environmental history is not a struggle between good and evil.”<sup>19</sup> Ultimately, I argue that the question of whether or not past societies abused or mismanaged the environment is important, but that historians should immerse themselves in the mentalities of those societies in order to contextualize this abuse or mismanagement within the worldview of those societies. Past

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<sup>17</sup>Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II* (New York: Harper and Row, 1972), 18, 20-1.

<sup>18</sup>Declensionist narratives dominate the historiography for the Mediterranean, especially in forest histories. J. Donald Hughes argued that Mediterranean civilizations “damaged themselves and brought their civilizations into decline” and that “the existence and welfare of human societies depends upon maintaining a balance with nature.” Hughes took Braudel’s environmental determinism and expanded it, locking human societies into a path of environmental degradation, caused by their own hands. See J. Donald Hughes, *Ecology in Ancient Civilizations* (Albuquerque: University of New Mexico Press, 1975), 5, 19, and 137. Similarly, J.V. Thirgood argued that deforestation played a part in the rise of ancient civilizations by making them switch to stone architecture. But deforestation continued into the modern era. See J.V. Thirgood, *Man and the Mediterranean Forest: A History of Resource Depletion* (London: Academic Press, 1981), v, 1-3. Russell Meiggs also focused on Antiquity and the rise of civilizations, arguing that, as civilization advanced, the use of timber naturally had to increase: “man’s needs in wood...became more demanding with the emergence of the palace states and the growth of trade in the Bronze Age.” See Russell Meiggs, *Trees and Timber in the Ancient Mediterranean World* (Oxford: Clarendon Press, 1982), 3, 377-80, and 403.

<sup>19</sup>Joachim Radkau, *Nature and Power: A Global History of the Environment* (Cambridge: Cambridge University Press, 2008), 20-1.

societies' beliefs about the natural world were relative to each society. The way different peoples reacted to and interacted with environmental forces was reflective of their own intellectual traditions and response mechanisms.

Environmental historians of Latin America and the Spanish empire have also demonstrated that early modern Europeans' understanding of the natural world and their place within it underwent incredible change during the sixteenth century. Many environmental histories of the Spanish empire have focused on the environmental destruction brought to the Americas by Spaniards. Hildeberto Martínez argues that the "*sociedad prehispánica*" (pre-Hispanic society) became the "*sociedad conquistada*" (conquered society) due to what he calls "agrarian plundering." Martínez's conception of victimized nature also extended to Amerindians, who were the "*botín de guerra*" (spoils of war). Spaniards moved into territories ravaged by war, the so-called "*tierra de nadie*" (depopulated lands), and installed their own agriculture in place of indigenous agriculture.<sup>20</sup> Martínez's description of the Spanish conquest as total and as completely geared toward malevolent destruction has been mirrored by environmental historians as well.

The environmental history of the Spanish empire has largely been dominated by the narrative Alfred Crosby sets out in *Ecological Imperialism*. In that book, Crosby argues that the emergence of so-called Neo-Europes—portions of the world conquered and reshaped in the image of Europeans starting in the medieval era—took place not just because of Europe's technological or economic advantages, but also due to its biological advantages. For Crosby, the beginning of early modern European expansion across the Atlantic marked the "current reconstitution of Pangaea" and brought an end to many New World peoples and landscapes

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<sup>20</sup>Hildeberto Martínez, *Codiciaban la tierra: el despojo agrario en los señoríos de Tecamachalco y Quecholac (Puebla 1520-1650)* (México, D.F.: CIESAS, 1994), 11-2.



while ushering in European global hegemony.<sup>21</sup> Crosby's narrative of Europe's biological dominance in the New World continued in Eleanor Melville's *A Plague of Sheep*. Melville focused on Mexico's Valle de Mezquital, documenting how the arrival of Old World livestock helped to transform the Mexican landscape into one favorable for Spaniards. Crosby's and Melville's narrative placed certain historic forces at the forefront: the search for surpluses of food and wealth, and the competition or lack thereof between Old World and New World peoples, flora, and fauna.<sup>22</sup> Both works are magisterial in environmental history and the history of empires, and they are excellent at demonstrating the links between environmental change and the course of empire, particularly in terms of linking the control of nature with the exercise of power more broadly.

But while the narrative of Crosby and Melville explains *how* Spaniards, along with other Europeans, had such great success in the Americas, Crosby and Melville do not delve deeper into *why* Spaniards valued certain animals and agricultural practices or how these values then shaped the conquests. Crosby and Melville are inconsistent in their treatment of Spanish imperialism. From their perspective, Spaniards acted both consciously and unconsciously, purposefully laying waste to indigenous civilization through the combined means of war, terror, and invasive ungulates like sheep. At the same time, Spaniards indirectly and unconsciously affected even greater death and destruction with infectious disease and Old World biological superiority. Andrew Sluyter attempts to get at the "why" of Spanish imperialism by examining the Iberian origins of Spanish cattle ranching in colonial Mexico. He argues that the Mexican lowland plains on the Gulf Coast acted as an "environmental homologue" to the Guadalquivir marshes of

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<sup>21</sup>Alfred Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (Cambridge [Cambridgeshire]: Cambridge University Press, 1986), 9.

<sup>22</sup>Elinor G.K. Melville, *A Plague of Sheep: Environmental Consequences of the Conquest of Mexico* (Cambridge [England]: Cambridge University Press, 1994), and Crosby, 3 and 7.

Andalusia. The Gulf Coast became home to vast cattle herds, imported from Europe. Sluyter supports the idea that Iberian grazing ecology emerged from the peninsula's semiarid plateau, followed the Reconquista into Andalusia, and then finally moved into Mexico with the conquistadors.<sup>23</sup> It was in the Mexican lowland plains, Sluyter says, that Melville's socio-ecological invasion and subjugation of Mexico started.<sup>24</sup> Gregorio de Villalobos, a subordinate of Cortes, looked at these lowlands at the mouth of the Rio Jamapa and he saw an environment suspiciously similar to *las marismas del Guadalquivir*.<sup>25</sup> Villalobos installed a cattle-grazing pastroecosystem in the region.

Despite the wishes of the Crown who sought the protection of indigenous peoples, the indigenous agriculturalists, much like the Arab agriculturalists during the Reconquista, bore the full brunt of the Spanish takeover. As a result, indigenous communities along the Gulf Coast were forever stunted, preventing the regeneration of indigenous population levels and directly aiding in the socio-political ascension of the Spanish colonialists. Cattle ranching overran indigenous agriculture, destroying both the subsistence basis of indigenous culture, and erasing a "wealth of agroecological knowledge."<sup>26</sup> While Spanish imperialism did bring environmental destruction in the Americas, the extent of that destruction has been called into question by historians.

Many historians have pointed to the environmental degradation of the Mediterranean<sup>27</sup> as evidence that Spanish environmental behavior was inherently destructive, but Butzer and Butzer draw on pollen evidence to argue that, after the Bronze Age, the Mediterranean woodlands have

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<sup>23</sup>Andrew Sluyter, "The Ecological Origins and Consequences of Cattle Ranching in Sixteenth-Century New Spain," *Geographical Review* 86, no. 2 (April 1996): 162.

<sup>24</sup>*Ibid.*, 163.

<sup>25</sup>*Ibid.*, 167.

<sup>26</sup>*Ibid.*, 173-4.

<sup>27</sup>Chapter one goes into much more detail about this historiography.

been managed in a sustainable fashion: “equilibrium management was the rule, rather than the exception.” They blame the damage that has occurred on modern industrial practices and sewage waste. In regards to Latin American environmental degradation, they argue again that it was industrial technologies, and not the efforts of Spanish colonists from the first century of colonialism, that affected massive damage on Latin American ecosystems. Furthermore, the Crown and viceregal governments often recompensed damages to indigenous crops.<sup>28</sup> Endfield and O’Hara follow Butzer and Butzer’s assessment, saying that there is little archival or empirical evidence to indicate an ecological revolution within the first century of colonial rule:

By the time the first detailed environmental information began to be accrued either in the form of surveys or addenda descriptions in official documents at the close of the sixteenth century, it is evident that some areas of the Purépecha state, notably the central heartland areas, had undergone significant levels of environmental deterioration and, in some cases, degradation.<sup>29</sup>

While there is significant evidence to suggest wide-scale environmental destruction during the industrial age, it is difficult to demonstrate the same level of destruction in the colonial era. This dissertation will not focus on destruction, but rather the rationale used by Spaniards as it occurred. In their minds, it was not destruction at all but reshaping the New World in the Old World’s image.

Sluyter’s “environmental homologue” concept reflects this dissertation’s own emphasis on the internal logic of imperialism. Underlying all of the deleterious Spanish actions and practices were important environmental concepts and ideas that evolved as Spaniards left the Iberian Peninsula and crossed the Atlantic. When early modern Spaniards constructed new cities,

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<sup>28</sup>Karl W. Butzer and Elizabeth K. Butzer, “Transfer of the Mediterranean Livestock Economy to New Spain: Adaptation and Ecological Consequences,” in *Global Land Use Change: A Perspective from the Columbian Encounter*, edited by B. L. Turner et al, 151-193 (Madrid: Consejo Superior de Investigaciones Científicas, 1995), 172-3 and 182.

<sup>29</sup>Georgina H. Endfield and Sarah L. O’Hara, “Degradation, Drought, and Dissent: An Environmental History of Colonial Michoacán, West Central Mexico,” *Annals of the Association of American Geographers* 89, no 3. (1999): 403, 407, and 414-5.

introduced livestock to a certain area, or extracted certain resources, they did so because they had complex, historically-constructed attitudes about how resources should be used and beliefs about how mankind related with the natural world. My dissertation does not absolve Spaniards of their crimes and destruction in the Americas. Rather, it seeks to historicize their actions and demonstrate how their own ideas of management and wealth justified such destruction.

Many environmental histories of Latin America have lost sight of the transformative power of texts and discourse. This does not mean Melville and her followers have ignored text. On the contrary, the sorts of analyses these authors perform requires an extensive knowledge of Spanish colonial bureaucracy and its paper trail. But their over-emphasis of quantitative data has handicapped our understanding of how empire exercised itself in Spain's American holdings. Spanish imperialism operated in more subtle ways than the fire-and-brimstone destruction of indigenous peoples and invasions of exponentially-multiplying ungulates. Empire operated in multiple dimensions. Using the power of text, New World writers took the vast and exotic lands of the New World and made them knowable. The discovery and conquest of that characterized the early sixteenth century quickly transitioned into categorization by the latter half of the century. In this way, a pueblo in New Spain could be imagined and managed in the same way as a Peninsular municipality. This form of homogenization was more subtle and more ambitious in its goals than the act of transferring Mediterranean livestock to New World territories. An environment, much like empire, operates on multiple planes of reality beyond the physical, ecological one. The environment could be manipulated physically, but as the *Relaciones* and Velasco's *Descripción Universal de las Indias* prove, it could also be manipulated in the realm of the imagination. This realization provides the reader with a fresh approach to Latin American

environmental history, eschewing the quantitative and declensionist approach that has characterized the field.

This dissertation offers a new paradigm for the understanding of early modern Spanish environmental history. While Crosby and Melville treat early modern Spanish ideas about the environment as both monolithic and inconsistent, I contend that the Spaniards had competing, even conflicting, ideas about the environment at the height of their empire. On the one hand, Spaniards sought to act according to traditional environmental ideas. These “traditional” ideas revolved around a Judeo-Christian moral economy, as well as the Biblical origins of humanity, labor, and agriculture. In that worldview, material wealth was useless in itself without labor and too much material wealth had the ability to cause great harm. The economic pie was fixed; wealth could not be increased in a capitalist sense, but rather, it had to be brought to life or it would lie dormant. Yet wealth could also prove poisonous and sicken the *república*—too much of a good thing can be bad. Thus, some Spaniards stressed the need to avoid excess, and aim for moderation and balance—wealth needed careful management. At the heart of these beliefs was not the destruction of the American environment, but rather, an ideal relationship between nature and civilization.

Early modern Spanish forest conservation documents reveal the medieval sense of moral economy within agrarian communities. E.P. Thompson touches on moral economy in eighteenth century England, where there was a similar socio-political context to Luis de Madrid and his municipal contemporaries. On May 1723, the English parliament passed the Black Act, a series of legislation designed to protect the King’s forests from poachers and other undesirables. Thompson argues that, in the sixteenth and seventeenth century, the law was “less an instrument of class power than a central arena of conflict.” The rule of law did not necessarily equate to

arbitrary power. So while the Black Act helped lead to the extinction of indefinite agrarian use-rights in eighteenth-century England, the law was still able to check the rulers' actions. Law could and should transcend the inequalities of class power and engender a sense of common good within a community. E.P. Thompson argues that the legacy of the sixteenth and seventeenth centuries was an eighteenth century "ideal aspiration toward universal values of law."<sup>30</sup>

In some ways, early modern forest conservation and the discourses on the proper behavior of merchants bear out Thompson's assertion. Luis de Madrid and other municipal leaders imagined the community on the scale of the municipality and its immediate environs, while Tomás de Mercado imagined the community on the scale of the *república*. In both cases, these men call on a sense of common good or common welfare to justify their claims. The misuse of forest resources or rampant merchant greed could bring irreparable harm not just to individuals, but to the entire community. James C. Scott, in his analysis of agrarian life in Southeast Asia, further elucidates the idea of moral economy. As Scott notes, the ruling elite in an agrarian society can demonstrate its management *bona fides* by employing resources in ways which "meet the broadly defined welfare needs of villagers." The demands of village life impose certain standards of performance on the elite and, furthermore, each member of the village has a certain obligation to each other. Thus, the general populace and elite, together, help to enforce the rule of law and/or the will of the community.<sup>31</sup> The moral barometer with which an agrarian society gauges injustice is, as Scott says, a vague sense that a "fair price" or "true value" exists and that to attempt an exchange that contradicts the true value of the goods in question is

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<sup>30</sup>E. P. Thompson, *Whigs and Hunters: The Origin of the Black Act* (New York: Pantheon Books, 1975), 21-2, 264-6, and 268-9.

<sup>31</sup>James C. Scott, *The Moral Economy of the Peasant Rebellion and Subsistence in Southeast Asia* (New Haven: Yale University Press, 1976), 41 and 168.

unjust.<sup>32</sup> While many conquistadors and other Spanish imperialists undoubtedly sought individual gain at the expense of their fellow human beings, this dissertation will show how the idea of moral economy dominated sixteenth-century Spanish political and economic thought.

The image of the rapacious conquistador paints Spanish imperialism as a winning venture for all Spaniards when, in fact, many Spaniards found themselves on the losing end of the new imperial order. The landed elite in Spain found their positions under attack as the new circumstances of the sixteenth and seventeenth centuries created new opportunities and challenges. The discovery of the Americas and the opening of the Atlantic economy opened the door for urban merchants and for conquistadors to rise in society, and new ideas about how humanity should interact with the environment rose with them. Whereas Spain's theologians and economists cautioned against excess and against the value of material wealth, the newly wealthy conquistadors and merchants fell more in line with how historians have characterized early modern Spanish imperialists—greedy, self-interested men who put the bottom-line above moral quandaries about the treatment of indigenous peoples or the economic health of the community. But even as their own wealth and influence increased, they also had to contend with abundance and the limits imposed upon them by economic forces they could hardly understand. This dissertation demonstrates that particular circumstances dictated the Spanish environmental discourse at different times. A human society at any given time rarely interacts with the natural world in just one way. This is certainly true for the modern world and it was the case for early modern Spain.

Finally, I do not pretend that any of the historical actors I describe fall neatly into one way of thinking or another. In that sense, it does not work to define traditional ideas as local, non-imperial, anti-capitalist, or anti-noble. Rather, the debates seem to reflect competing

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<sup>32</sup>Scott, 165.

positions based on particular circumstances. In some cases, the interests of the monarchy would seem to side more with new ideas. When it came to conserving Spain's forests, for example, the monarchy needed the timber to build and support its navy, so the monarchy came into conflict with local communities who needed the timber for their own purposes. But other times—such as establishing new colonial cities or when requesting knowledge about the American lands—the monarchy might have continued to side with a traditional view of the environment where the extractive value of the land was key.

*Economic History, the Question of a Spanish Decline, and Methodology*

This dissertation focuses on several distinct modes of production in the forms of agriculture and timber production in Iberia, and the extraction of precious metals in the Americas. I want to sketch a general overview of early modern Spanish society across over one hundred years of time and across two continents. This leads one to the seemingly antithetical task of speaking in generalities while also recognizing historical complexity. This dissertation accomplishes this task by focusing on modes of production. They are useful for analyzing power dynamics across the empire, locating the origins of said power in the management of resources. Furthermore, the historical actors in my dissertation actively reference these modes of production. Thus, this project often walks a fine line between early modern Spain's real economic situation and how people living at the time perceived their economic situation. One issue in early modern Spanish history that demonstrates this balancing act is Spanish decline.

Early modern Spanish historians have debated whether or not there was a Spanish decline in the late sixteenth and early seventeenth century. This dissertation assumes that the Spanish empire experienced some economic and political decline, but its central argument does not hinge



on whether the decline was real or not. Chapter four goes into depth on the raw statistics in terms of population decline, the stagnation of Spain's domestic industries, and the decline in Spain's agricultural output. What matters more for this project is that early modern Spaniards believed the decline was *very real*. Their economic rhetoric and the language they used to describe their relationship with the environment points to a society preoccupied with averting failure. This dissertation shares Henry Kamen's focus on the intellectual responses to perceived decline. He argues that decline underlined worsening contrast between "imperial might abroad and organic weakness within."<sup>33</sup> Early modern Spaniards constructed an idealized past as an alternative path Spain could take to recapture its former glory. The defining feature of this idealized past was a primeval innocence, associated primarily with a pastoral setting.<sup>34</sup> Chapter one's analysis of conservation legislation contextualizes Kamen's "pastoral setting" by grounding it in the concrete, everyday environmental concerns early modern Spaniards.

This dissertation contextualizes the Spanish "decline" not just in economic terms, but as a vast overlapping of cultural, political, and economic thought across different parts of society. That said, early modern economic history has mostly focused on the intellectual elite and on the evolution of global capitalism. Earl J. Hamilton, the originator of the Price Revolution as a concept, emphasized the statistical, quantitative reconstruction of Spanish wealth. He argues that the vast amount of exports and imports coming through Seville and the Council of the Indies aided in the rise of capitalism. As prices rose and wages remained stagnate, wealth became concentrated among the middle and upper classes of society.<sup>35</sup> Karl Marx had already expounded

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<sup>33</sup>Henry Kamen, *Crisis and Change in Early Modern Spain* (Aldershot, Hampshire, Great Britain: Variorum, 1993), 25.

<sup>34</sup>*Ibid.*, 38-40.

<sup>35</sup>See Earl J Hamilton, *American Treasure and the Price Revolution in Spain, 1501-1650* (New York: Octagon Books, 1965); François Simiand, Michel Rosier, and Lucien Gillard, *François Simiand (1873-1935): sociologie, histoire, économie* (Amsterdam: Ed. des Archives contemporaines, 1996); Vilar, *crecimiento y desarrollo*, 141-2.

on the impact of American riches on Europe's economy, saying that the Spanish empire's wealth "was one of the circumstances that favored the growth of capital and the ascent of the bourgeoisie in the sixteenth century."<sup>36</sup>

Marx and Hamilton locate the birth of capitalism in the sixteenth century and this dissertation does not necessarily discount their assessment. But their argument has certain weaknesses that examining environmental language can bring to light. As Pierre Vilar notes, the term "capitalist" is anachronistic, in part, because sixteenth-century Castile and Aragon was not industrialized. Furthermore, it is difficult to apply a unified economic theory like capitalism to this region and time because there was regional variability in terms of economic development. Some areas of the Iberian Peninsula had better economic development than others and there was a diversity of modes of production. For example, transhumanist sheep and cattle herders formed a powerful conglomerate within Castile, the *mesta*, and their influence extended beyond a capitalist system's class structure.<sup>37</sup> There was economic difference in early modern Spanish society, but the lines of separation still resembled a medieval, feudal order.

Marx and Hamilton's work is important, however, because it hints at one of the central anxieties of the early modern period: the feudal economic order perceived its own decline. The debates over the economic primacy of precious metals versus agriculture demonstrate this perceived decline. Feudalism draws its power from agricultural wealth. But as the merchant-class and conquistadors gained influence, it became clear that agricultural wealth did not command the same influence it once had.

A basic question lies at the heart of this project: how did people in the past imagine their environment and their place within it? I will answer that question by conducting an extensive

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<sup>36</sup>Karl Marx, *Wage, Labor and Capital* (ed. Fr., ESI, 1931), 44; in Vilar, *crecimiento y desarrollo*, 145, f.13.

<sup>37</sup>Vilar, *Creimiento y desarrollo*, 156-9.

analysis of the economic language early modern Spaniards used. This project isolates and analyzes several keywords that consistently appear in the economic, political, and geographical literature of the Spanish empire. Terms like “conservation,” “knowledge,” “scarcity,” “management,” and “abundance” continually shaped early modern Spanish environmental thought. While social upheaval was not unusual for any of the burgeoning empires and nation-states of the early modern period, the environmental subtext that underlay early modern Spanish thought in this time of crisis deserves consideration. The socio-economic crises of the golden age operated on a variety of geographic scales, from the passing of conservation legislation in Andalusian municipalities to debates over the entire economic foundation of the empire itself. This is a broad survey of different imperial conditions and scenarios. Thus, this dissertation eschews a focus on one region or scale, treating the empire as the decentralized, contested entity that it was.

My project will enrich several burgeoning fields and answer several key questions about the relationship between nature and empire. How did environmental thought affect the evolution of the empire and how did the existence of empire then shape environmental thought? What kinds of language did early modern Spaniards use to conceptualize the natural world, and how does this language differ from modern conceptions of the environment? Environmental history has a rich tradition in the Mediterranean and Latin America, but there is further need of scholarship which transcends these geographical borders and attempts to synthesize the Spanish imperial experience in the Mediterranean and Latin America. In the realm of ideas and language, early modern Spaniards struggled with what they believed to be universal truths about humanity’s relationship with the natural world. Furthermore, my dissertation will touch on some of the broadest issues facing environmental historians and European historians more broadly. It

will enrich current models of early modern European state formation and encourage environmental historians to emphasize culture more in their discussions of human-nature interaction.

### Organization

Chapters one and two attempt to root the history of the Spanish empire in Mediterranean history and discuss municipal efforts to conserve forest and pasture resources, utilizing several case-studies from villages in Andalucía and Castile. In the face of a variety of environmental and economic pressures, Spanish communities proposed or enacted conservation legislation that sought to protect the regions' forest and pastures from overuse. In some cases, royal authorities set aside timber for naval projects while, in others, periodic famine and insect plagues made the fruit and nut-trees a bare-bones form of sustenance in the absence of substantial wheat reserves. This story is important not only in terms of environmental adaptation strategies, but also in terms of the evolution of municipalities and the political evolution of the Spanish kingdom itself. In her seminal work, *Liberty in Absolutist Spain*, Helen Nader argues that the municipality was the most elementary, and important, political unit in the Spanish empire.<sup>38</sup> This chapter adds to her work by arguing that conservation legislation represented an effort by Spanish municipalities to consolidate their territory. They reimagined the countryside in municipal terms, bringing that environment under their control.

Chapter three will examine newly-founded municipalities in Mexico and Peru during the mid-sixteenth century. Perhaps the most famous example of the municipality's efficacy as an agent of empire was the founding of Veracruz by Hernán Cortés and his expedition in 1519. The

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<sup>38</sup>Helen Nader, *Liberty in Absolutist Spain: The Habsburg Sale of Towns, 1516-1700* (Baltimore: Johns Hopkins University Press, 1990, x, 1 and 3.

“largely fictitious” council of Veracruz could then appeal to the king and grant Cortés permission to explore the Mexican interior. While the town itself may have been little more than a beachhead at the time, the authority it wielded was very real. Similarly, Lima functioned as both a functional and symbolic seat for Spanish control over the former Incans. Founded by Francisco Pizarro in 1535 as the “Ciudad de los Reyes,” Lima was one of many cities established by Iberians in the Americas in an attempt to grant themselves political legitimacy and to bring order to the countryside. This chapter will mirror chapter one of the dissertation by examining the municipality in terms of social and spatial organization, while also focusing on the conquistadors themselves as representatives of new imperial wealth. The municipality again delineated power while reorganizing the landscape in new ways.

Chapter four focuses on the efforts of the Crown to ascertain the geographic scope and wealth of the newly-acquired lands in the Americas. Its primary texts will be the *Relaciones Geográficas*, Velasco’s *Geografía y descripción de las Indias*, and several other related treatises. During this period of information-gathering, Spanish conquistadors, colonial administrators, and royal advisors imagined a New World whose resources were infinite. The chapter starts with Columbus’ and Cortés’ obsession with gold and then pushes into the search for other types of resources like medicinal herbs. The idea that the New World was “virgin soil” that the Spaniards could cultivate for their own purposes drove Spanish efforts to consolidate their rule over the Americas.

As the sixteenth century progressed, the Spanish belief that New World possessed unfathomable riches coincided with their desire to exert greater control over the region. Starting in the 1560s, several socio-economic crises inspired Philip II to push for reform of the colonial administration in order to curb waste and abuses of power. Within this context, descriptive texts

like the *Relaciones* served a more profound purpose. Building on the first and second chapter's theme of political consolidation during the Golden Age, the third chapter demonstrates how geographic texts reflected the Crown's desire to organize and manipulate space. Despite the belief that the New World had near infinite resources, the Crown still believed that its hand was needed to control those resources.

Chapter five analyzes the debates that erupted over the socio-economic benefits and problems caused by an overabundance of precious metals. Starting in the mid-sixteenth century, the flow of American gold and silver into European markets caused inflation and aggravated a downturn in Spain's economy. Spanish theologians and economists wrestled with the seemingly paradoxical idea that an overabundance of gold and silver could somehow create *more* poverty in Spain. Figures such as Tomás de Mercado argued that market economics lay at the root of the problem, cultivating a decline in Spanish morality as merchants marked up commodities by astronomical percentages. Other reformers, such as Lope de Deça, posited that a reemphasis on agriculture was the answer to Spain's problems.

Chapter four argues that, across the board, these reformers based their arguments on particular environmental imaginaries. Specifically, they believed that Spain was much wealthier in the past and that it was an "earthly paradise" that had been lost. Through agriculture, Spaniards would be able to recreate this previous state. It would fend off laziness and wean Spain off precious metals and the decadence the metals had caused. Finally, the debate over gold and silver revealed an important assumption about the natural world that early modern Spaniards held: the environment only held as much value as human effort could draw from it. This belief established the relationship between man and environment in their minds: the world was created for humans and then shaped by humans.

## CHAPTER ONE

**Reconciling Mediterranean History with Spanish Imperial History**

An entire school of environmental history has emerged which examines the Mediterranean basin as a whole. In these histories, scholars discuss the Iberian Peninsula in conjunction with other regions in the Mediterranean in terms of climatic and ecological similarities. These histories concern themselves with detailing, or refuting, a story of environmental decline caused by Mediterranean societies.<sup>39</sup> Thus, whenever the topic of the deforestation and land management in the Iberian Peninsula appears in this literature, it invariably gets tied into the overall narrative of Mediterranean environmental decline. In their zeal to paint the Mediterranean as a climatic and cultural unity, and in order to avoid the pitfalls of nation-centered analyses, these authors have largely ignored the internal debates within Spanish historiography. Previous histories of imperial landscapes have tended to focus mainly on the human actors inhabiting those landscapes. An environmental-history perspective allows us to take in a wider selection of causal agents, not just the human actors and their institutions. Non-human actors were affected by social structures as much as human actors, and often in similar ways. A historical analysis that discusses human and non-human actors in conjunction has the ability to construct a more complete picture of how human beings imagined themselves and their

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<sup>39</sup>Mediterranean environmental history has a dense historiography. Declension narratives, stories which detail humanity's mismanagement of the natural world over time, dominate this scholarship. However, there have been attempts to refute declension narratives. Several books which discuss environmental decline in the Mediterranean are J. R. McNeill, *The Mountains of the Mediterranean World: An Environmental History* (Cambridge: Cambridge University Press, 1992); Russell Meiggs, *Trees and Timber in the Ancient Mediterranean World* (Oxford: Clarendon Press, 1982); and J.V. Thirgood, *Man and the Mediterranean Forest: A History of Resource Depletion*. For an example of recent scholarship which has called into question environmental decline, see A.T. Grove and Oliver Rackham, *The Nature of Mediterranean Europe: An Ecological History* (New Haven: Yale University Press, 2001).

world that other kinds of history—social history, economic history, political theory, etc.—may lack.

If forest history and the history of energy flows have not provided a sufficient context within which to place early modern Spanish conservation, perhaps Mediterranean history can provide that context. A quick analysis of that literature, however, reveals that histories of the Mediterranean World have been wrestling with similar issues of anthropocentrism and decline. Scholars have been studying the Mediterranean Sea, in one form or another, for centuries. The concept of a “Mediterranean World,” on the other hand, is a fairly new idea. Beginning with Fernand Braudel’s *Mediterranean in the Age of Philip II*, first published in 1949, historians of the region began to look at climate, vegetation, and the sea itself as historical agents with implications for human societies. This new scholarly movement coincided with the development of environmental history in the United States during the first half of the twentieth century. Environmental history, like Mediterranean World theory, set itself the task of reevaluating the historical relationship between humanity and the natural world. Mediterranean environmental history, as a young historical field, has produced a small amount of literature. Two works, however, stand out as landmarks in the field. Braudel’s book is one; the other is *The Corrupting Sea* by Peregrine Horden and Nicholas Purcell, published in 2000. Using those two works as benchmarks, the task of tracing the broad contours of Mediterranean environmental history becomes much easier. Declensionist narratives view the history of humanity’s interaction with the natural world as a story of destruction caused by humanity’s ecological ignorance, its greed, and its will to exploit the natural world. Every historian who delves into Mediterranean environmental history has to grapple with these two concepts. Most of the field’s scholars have



accepted these ideas and have propagated them. From the 1950's to the turn of the century, elements of environmental determinism and declension colored every work which was produced.

The dichotomy inherent in Braudel's *Mediterranean World* became commonplace in Mediterranean histories for the next fifty years. J. Donald Hughes, in 1975's *Ecology in Ancient Civilizations*, argued that the fall of Mediterranean civilizations was a consequence of environmental degradation caused by humans. He claimed that those civilizations "damaged themselves and brought their civilizations into decline" and that "the existence and welfare of human societies depends upon maintaining a balance with nature."<sup>40</sup> Hughes took Braudel's environmental determinism and expanded it. Human societies, from this new viewpoint, are once again prisoners of their environment, but now they are prisoners of environmental degradation, caused by their own hands. Hughes' declensionist reading of history is most clear in his discussion of the Roman Empire: "while the early Romans had worshiped nature and had been inhibited from making major changes in the environment by religious taboos, the Romans of the middle and late Republic and the Empire were increasingly utilitarian and willing to exploit their natural resources"<sup>41</sup> This search for examples of capitalistic thinking and land-use practices in ancient civilizations consumed that generation's scholars. It is strange, then, that Hughes says, in the introduction of his book, that "the dichotomy of human activities and the natural environment is false...mankind is part of nature and both acts upon and is acted upon by the rest of the natural world."<sup>42</sup> He actually reinforces that dichotomy by painting the environment as a "victim" of humanity.

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<sup>40</sup>J. Donald Hughes, *Ecology in Ancient Civilizations* (Albuquerque: University of New Mexico Press, 1975), 19.

<sup>41</sup>*Ibid.*, 137.

<sup>42</sup>*Ibid.*, 5.

In 1981, J.V. Thirgood discussed the forest history of the Mediterranean, focusing on the “regression and rehabilitation of the Mediterranean landscape “and how it is “inextricably bound up with the political, social, and military history of the peoples of the region.” He argued that deforestation played a part in the rise of ancient civilizations by making them switch to stone architecture. But deforestation continued, said Thirgood, into the modern era. The images of the French Riviera and Italy—the Mediterranean as tourist paradise—have obscured environmental realities, as well as masked the economic disparity between the European Mediterranean and the rest of the region. He stressed the “part played by forests and forest products in the lives of nations” and how their “rise and fall...has been inextricably bound up with the deforestation of the land.”<sup>43</sup> So many elements of his thesis come from a declensionist, environmentally determined perspective. From this point of view, the health of an ancient civilization depended upon how much they practiced conservation. Conservation and preservation, as understood today, would not be recognized in the ancient world. While he was on the right track to explore the economic disparity between the European Mediterranean and the rest of the region, linking a civilization’s health with environmental conservation simplifies the narrative and does not take into account the entire gambit of historical actors.

Other authors focused on forests and deforestation as agents of change. Russell Meiggs’ *Trees and Timber in the Ancient Mediterranean World* examined the importance of wood for ancient civilizations. He argued that, as civilization advanced, the use of timber naturally had to increase: “man’s needs in wood...became more demanding with the emergence of the palace states and the growth of trade in the Bronze Age.”<sup>44</sup> In his discussion of deforestation, he blames

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<sup>43</sup>J.V. Thirgood, *Man and the Mediterranean Forest: A History of Resource Depletion* (London: Academic Press, 1981), v, 1-3.

<sup>44</sup>Russell Meiggs, *Trees and Timber in the Ancient Mediterranean World* (Oxford: Clarendon Press, 1982), 3.

the retreat of the Mediterranean's forests on the encroachment of human agriculture and mining.<sup>45</sup> The exploitation of forest resources started by ancient peoples continued up into the modern day. Modern industry, in the form of paper production, illustrates humanity's continued dependence on the forests.<sup>46</sup> Mobilizing natural resources for the purposes of societal growth is an idea which appears throughout environmental histories. These types of histories try to find historical agency for nature by examining the exploitation of nature and how societies are formed out of this exploitation. While these histories have good intent—to take nature out of the background and make it a dynamic actor in human history—they can have the paradoxical effect of making humanity a background actor. There is an inherent tension in these narratives: humanity is a poor manager that inevitably destroys the natural world, but humanity is also a prisoner of that environment.

In 1992's *Mountains of the Mediterranean World*, J.R. McNeill attempted to explain the decline of the “mountain way of life” in the Mediterranean. He focused on the ideas of “overshoot” and “undershoot.” Overshoot occurs when a human population is too large for a region's given resources to support it. Undershoot, by comparison, occurs when there are not enough people in a given region to monitor irrigation works and to undertake agriculture. These two ideas matter most in “fragile ecosystems” like the Mediterranean mountains. Human societies in those ecosystems are heavily dependent on equilibriums in population density for survival: “human communities in marginal environments live under a death sentence, which can be stayed only through careful husbandry of the land.” McNeill's argument was an improvement over older narratives. Unlike in those narratives, the environment is not just a victim of rapacious human industry. McNeill recognized that managed landscapes are both human artifacts and part

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<sup>45</sup>Ibid., 377-80.

<sup>46</sup>Ibid., 403.

of the natural world. But while his analysis of population density is crucial to our understanding of Mediterranean societies and ecosystems, one could argue that humanity is lost in population statistics. In a more discrete way, the idea of “carrying capacity,” or the maximum population of the species an environment can sustain, was the same environmental determinism that other historians had championed previously. Different areas of the world have different carrying capacities, meaning that certain areas will be able to support more or less people, animals, and industry. Furthermore, in his discussion of market forces in the region, he once again presents a story of decline, saying that market integration was a “mixed blessing” and was “corrosive of the mountain way of life.”<sup>47</sup> By saying that something has declined, one has to assume that it was once better, or that it can be revived in the future. While it is largely impossible to remove personal bias from historical analysis, environmental historians are sometimes guilty of placing value judgments on the activities of people from the past.

From the time of Braudel until the turn of the century, historians writing about the Mediterranean looked at the interaction between man and nature as a one-sided affair. Humanity was either doomed by “fragile ecosystems” or, humanity had irrevocably damaged the natural world with its mining, agriculture, and inherent avarice. These environmentally determined, declensionist narratives sprang from a desire to reincorporate nature into history and to caution modern man about his environmental policies. They found the predecessors of the modern industrial regime in ancient Rome and Greece. But in doing so, they committed themselves to teleology with two trajectories: ancient peoples tended toward destructive industrialism, or they were forerunners of modern preservation who were more ecologically aware. At the turn of the

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<sup>47</sup>J.R. McNeill, *The Mountains of the Mediterranean World* (Cambridge: Cambridge University Press, 1992), 2-3, 7, 8, 11.

century, a new generation of writers reexamined these traditional narratives and began the process of reevaluating environmental determinism and declension as theoretical devices.

Horden and Purcell's *Corrupting Sea* was both an update and a rejoinder to Braudel. First, they made a distinction between a history "in the Mediterranean" and a history "of the Mediterranean." The former, they said, is related only "contingently or indirectly to its geographic setting" while the latter is the "product of a complex interaction of human and physical factors." The Mediterranean, in the latter approach, is no longer just a "material backdrop or a set of immutable constraints"<sup>48</sup> This new understanding of the Mediterranean recognized the Mediterranean's inherent environmental limits while allowing Mediterranean societies more agency to maneuver within those limits. From Horden and Purcell's perspective, Mediterranean history needed to move away from "abstract terms or inanimate things personified" and toward a more nuanced, holistic environmental approach.<sup>49</sup> They address authors like McNeill, saying that "mountain societies can no longer be characterized... primarily in stark Malthusian terms" which focus on poverty, geographic isolation, and population pressures on "scarce, overwhelmingly agrarian, resources."<sup>50</sup> In essence, they sought to free the region's history from all forms of exclusive determinism.

Horden and Purcell also addressed declensionist narratives. Though some Mediterranean peoples might have perceived the forest "as a hostile and useless environment," Horden and Purcell argue that attitudes toward woodland have been "much more positive and that it has very often constituted a vital part of the managed environment." They point out that the indirect uses of forest—as a wild food reserve or as pastoral land—could "increase the potential of the forest

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<sup>48</sup>Peregrine Horden and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History* (Oxford: Blackwell, 2000), 10.

<sup>49</sup>*Ibid.*, 36.

<sup>50</sup>*Ibid.*, 80-1.

without inevitably destroying it.”<sup>51</sup> The genetic diversity of the Mediterranean, argued Horden and Purcell, owes much to “humanity’s co-evolution with the other species in the region.”<sup>52</sup> Their history of the Mediterranean incorporated elements of biology, anthropology, and ecology into a new theoretical framework. Humanity, as a biological entity, could have unpredictable results on the natural world. Human management could lead to destruction, but it also reshaped the natural landscape and could promote genetic diversity, as well as the flourishing of new, modified ecosystems.

The historical approach characterized by Horden and Purcell continued into the 2000s. A.T. Grove and Oliver Rackham, approached the Mediterranean from a detached, encyclopedic point of view. They trace the development of the “Ruined Landscape” theory, an idea which fueled previous declensionist Mediterranean histories. Previous histories claimed that the Mediterranean was once as forested as non-Mediterranean Europe, and that forests were ruined by domesticated animals and human industry starting in Antiquity and continuing through the present day.<sup>53</sup> While Grove and Rackham believed that “the future of Mediterranean landscapes depends to no little extent on what happens to them in the long term,” they also caution against painting long-term environmental change solely in terms of human-caused environmental change.<sup>54</sup> To underline this idea, they examined terracing as a form of landscape modification for agriculture. During the Middle Ages, they argue that “many hamlets and villages and some whole landscapes” depended on terracing.<sup>55</sup> Human ingenuity and survival instinct, not commodity-fueled greed, often framed humanity’s relationship with the land.

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<sup>51</sup>Ibid., 332-3.

<sup>52</sup>Ibid., 329.

<sup>53</sup>A.T. Grove and Oliver Rackham, *The Nature of Mediterranean Europe: An Ecological History* (New Haven: Yale University Press, 2001), 8-9.

<sup>54</sup>Ibid., 107.

<sup>55</sup>Ibid., 117.

Lin Foxhall was representative of the new approach of Horden and Purcell. “Without privileging environmentally based explanations or taking refuge in environmental determinism,” Foxhall argued, “it is clear that these landscapes are also shaped by the practical constraints of climate, geography and geomorphology, and the biology of plants and animals.”<sup>56</sup> Having said that, she sought areas where human society and nature co-evolved and shaped one another. One such area was technology. She examined the use of the plow by ancient civilizations, saying that “they share with many other Mediterranean rural societies the use of a nominal day’s ploughing as a fundamental land measure – the technological link between culture and nature.”<sup>57</sup> The idea that human technology could be viewed as a part of the natural world would have been anathema to older generations of environmental historians. The debate surrounding that idea speaks to a larger philosophical debate which has always raged in environmental history: what place do humans have in the natural world? Horden and Purcell, along with Foxhall, leveled the playing field by balancing environmental and human agency and demonstrating their symbiotic relationship. But declensionist, environmentally determined histories of the Mediterranean still persisted into the 2000’s.

Russell King and others combined a more ecologically complete picture of history with the fervor of modern preservation. They agreed that “climate dictates the vegetation, controls the land-use regimes of farming, [and] influences the seasonal and daily patterns of life.”<sup>58</sup> But at the same time, they said that the Mediterranean was “an area of shared environmental responsibility” and that Braudel’s definition was “clearly functional.”<sup>59</sup> They examined historical interpretations

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<sup>56</sup>Lin Foxhall, “Cultures, Landscapes, and Identities in the Mediterranean World,” *Mediterranean Historical Review* 18, no. 2 (December 2003): 75.

<sup>57</sup>*Ibid.*, 88.

<sup>58</sup>Russell King, Paolo de Mas and Jan Mansvelt Beck, eds., *Geography, Environment and Development in the Mediterranean* (Brighton: Sussex Academic Press, 2001), 4.

<sup>59</sup>*Ibid.*, 5.

of irrigation, saying that it “was viewed as part of the ‘hydraulic civilization’ where nature was tamed to bring about a kind of resourceful harmony.” Furthermore, they looked at modern preservation and conservation efforts, but saw only failure: “reforestation and the great works of hydraulic engineering over the past century have done little to assuage the repeated failures of the past.” They wrote off the contemporary environmental history of the Mediterranean as one of “broken promises, of resource greed and of ceaselessly exploitative and ecologically damaging agriculture and tourism.”<sup>60</sup> No one can deny the earnest ethical motivations of these historians. They realize that human beings can be both great destroyers of the environment and that the evidence for some environmental destruction caused by humans is indisputable. But to focus solely on environmental degradation alone is to miss out on remarkable stories of environmental adaptation, stories where humanity operated not as a destroyer, but as a co-evolving, multi-faceted environmental entity.

It is clear that environmental determinism and declension have played a major part in the writing of Mediterranean environmental history in the last sixty years. Both ideas ignore the ingenuity and remarkable adaptability of early modern Spanish peoples. Environmental determinism makes culture the prisoner of the physical world and denies human agency. Declension, similarly, reduces humanity’s relationship with the natural world to a crude, managerial one. From this standpoint, nature and culture are eternal adversaries in a war that will eventually end with the destruction of one or both of them. From the time of Braudel, Mediterranean environmental historians have stayed within the boundaries of the declensionist narrative. In doing so, their works have had the paradoxical effect of denying agency to both nature and culture. Environmental determinism and declension, while still valuable as ways in

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<sup>60</sup>Ibid., 11-2.



which to approach early modern Spanish and Mediterranean histories, unfairly confine past peoples and environments to determined historical trajectories.

### Citizenship and Nature

Tamar Herzog similarly tackles the social history of the early modern Iberian world in terms of citizenship. Her main argument was that the essence of early modern Spanish citizenship did not lay in legal definitions or in acts of authority. Instead, citizenship was a self-generating phenomenon that was socially legitimized at the local community level via access to certain rights and obligations to perform duties.<sup>61</sup> This, in turn, helped to shape a sense of community at the level of the kingdom and eventually at a national level. Herzog elaborated on *vecindad* (citizenship) and *naturaleza* (nativeness), paying special attention to the use of legal and state documents in historical research. Herzog's application of these documents, in turn, led to a second discussion: the strengths and weaknesses of examining citizenship as a process generated from below.

Herzog's analysis of early modern Castilian citizenship was a lesson in the advantages of examining citizenship at the local level. Additionally, she cautioned historians against an overreliance on state documents when trying to nail down the precise nature of early modern Spanish citizenship. In her elaboration on *vecindad* in local Spanish communities, Herzog employed a comparative approach using Seville, Madrid, and several northern cities. This approach was effective for several reasons. First, it demonstrated the arbitrary nature of who was and was not considered a citizen. Second, citizenship emerging out of local considerations and different historical contexts could produce different results. For example, Herzog argued that

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<sup>61</sup>Tamar Herzog, *Defining Nations: Immigrants and Citizens in Early Modern Spain and Spanish America* (New Haven: Yale University Press, 2003), 4.

Seville's understanding of citizenship changed depending on the economic situation. Municipal regulation of citizenship was looser when Seville was the nexus of Atlantic trade. But as Seville's economic position weakened, it tightened its citizenship regulation in order to exclude poor newcomers and to tie richer citizens permanently to the city. Herzog then does an admirable job of linking these various municipalities together by discussing Castilian common law. This law, which "did not depend on legislation, nor was reproduced in it," provided the standard by which Castilians could claim or contest citizenship.<sup>62</sup> She correctly argued that the relative absence of discourse about citizenship in the legal documents did not mean that Castilian did not exist, as some historians had argued. Instead, it proved that citizenship had a different reality, what Herzog called "citizenship by performance."<sup>63</sup> Herzog finishes this brilliant argument by stressing citizenship as a "situation" rather than a "status."<sup>64</sup> By emphasizing citizenship as a situation, Herzog recognized that local historical circumstances defined what citizenship meant at that particular time. As Keila Grinberg demonstrated in her discussion of the Brazilian civil code and slaves, the arbitrary and amorphous nature of citizenship and social status extended beyond the early modern period.<sup>65</sup>

If citizenship was a process that was generated "from below" at the community level, this raises several major considerations in terms of hegemony and power. As described by Herzog, the community acted as an anti-hegemonic force in many ways. While the king believed that naturalization was a royal prerogative that flowed from his position as ruler over a collection of kingdoms and vassals, local communities rejected this claim and argued that natives were

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<sup>62</sup>Herzog, 23-5.

<sup>63</sup>Herzog, 19.

<sup>64</sup>Herzog, 203.

<sup>65</sup>Keila Grinberg, "Slavery, Liberalism, and Civil Law: Definitions of Status and Citizenship in the Elaboration of the Brazilian Civil Code (1855-1916), in Sueann Caulfield, Sarah C. Chambers and Lara Putnam, eds. *Honor, Status and Law in Modern Latin America* (Durham: Duke University Press, 2005): 111.

distinguished from foreigners “by virtue of natural laws that the king could not modify.”<sup>66</sup> This indicates that, contrary to traditional early modern European histories that stress increasing centralization and the crystallization of modern bureaucratic practices, Spain remained a fragmented entity at the most elementary of levels. In this context, it would be easy to assume that citizenship discourses were not necessarily hegemonic discourses. If the state was the source of hegemony, then early modern Spanish communities did act in an anti-hegemonic fashion. But this would be true only if we analyzed citizenship from the narrow perspective of court and state. From a local point of view, citizenship was fundamentally a hegemonic process. As Herzog continually argued, citizenship discourses sought to divide people into “good” and “bad.” These discourses aimed to instill correct forms of behavior and it stressed ties to the community.<sup>67</sup> There was no room for people who could not demonstrate ties to a community *somewhere* because civilized behavior could only be demonstrated through activity in a community setting. This absolute understanding of citizen and noncitizen, native and foreigner, and good and bad echoes Marshall’s sentiment that citizenship “operate[d] as an instrument of social stratification.”<sup>68</sup> Though Marshall was talking about education and its role in legitimizing modern citizenship regimes, the example of early modern Spain demonstrated similar social pressures. Early modern Spain’s understanding of citizenship meant that hegemony operated at the local level before it could operate at the level of the kingdom or the nation.

Though Herzog adequately demonstrated the links between class and citizenship discourses, her analysis was lacking in some areas. Herzog’s treatment of the relationship between religious minorities and citizenship regimes was thin, though she readily admitted as

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<sup>66</sup>Herzog, 11.

<sup>67</sup>Herzog, 202.

<sup>68</sup>T. H. Marshall, *Class, Citizenship, and Social Development; Essays* (Garden City, N.Y.: Doubleday, 1964), 110.

much. There was the acceptance of foreigners and non-Christians as citizens in the medieval period, but by the early period, only Catholic Christians could be citizens in Castilian communities.<sup>69</sup> While the historical context of the Reconquista and religious mania made this shift seem obvious, fascinating work remains to be done on how discourses of citizenship evolved in the face of increasing religious zealotry, especially in Andalusia where ethno-religious conflict might have provided additional contours to early modern citizenship discourses. In addition, Herzog could have paid more attention to early modern Castilian understandings of rural and urban and how citizenship discourse reflected Castile's peculiar organization of the countryside. As scholars like Helen Nader have pointed out, the municipality was the most elementary unit of political organization in early modern Spain. The dichotomy between urban space and rural space did not exist because every piece of land was incorporated into one municipality or another.<sup>70</sup>

Furthermore, Herzog's work posed the problem as more than just a search for difference; it was also the community, and the desire to belong to a community, that gave the early modern Spanish world its peculiar shape. Herzog's work eschewed traditional interpretations of Spanish power that looked to the Crown or the state as the source of citizenship. Instead, it was "pressures from below" that led to the emergence of *vecindad* and *naturaleza*.<sup>71</sup> The search for difference still formed the basis of early modern Spanish society, but it differed from the racial and religious dividers upon which historians have traditionally relied.

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<sup>69</sup>Herzog, 26-7.

<sup>70</sup>See Helen Nader, *Liberty in Absolutism Spain: The Habsburg Sale of Towns: 1516-1700* (Baltimore: The Johns Hopkins University Press, 1993).

<sup>71</sup>Herzog, 205.

## CHAPTER TWO

**Claiming the Hinterlands: Municipal Conservation Legislation and Land Management***Introduction*

At the beginning of the fifteenth century, the ideas of scarcity and limits helped to define Spanish society. Perhaps no idea reflected this more than *conservación*, one of the most pervasive political imperatives that emerged in Spanish discourse during the sixteenth century. *Conservación* was a word bound up with social and political meaning. Cities across the Iberian Peninsula had been practicing forest and pasture management for centuries at this point. But now, at the dawn of Spain's Golden Age, the Crown also began implementing efforts to conserve the Peninsula's forest resources. *Conservación* was a management scheme that united the natural and social realms under either municipal or Crown law. There was a limited amount of forest resources from which to draw and, as a result, the realm's people, animals, and forests needed to be managed. Iberia's semiarid landscape, combined with other natural calamities, placed inherent limits on Spanish people's abilities to feed themselves and to build ships. There was a shift over time in medieval/early modern Europe from forests as collective spaces to privately-owned, and from thick forests to crops and pastures.<sup>72</sup>

This chapter lays out the environmental conditions that molded Spanish environmental thought in the late middle ages. It then details the conservation regimes laid out by several Spanish municipalities, as well as those pursued by the Spanish crown. The discourses of *conservación* and management would travel with Spain across the Atlantic and evolve as Spain's empire expanded. Historians often look to Spain's experiences in the Reconquista or in the

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<sup>72</sup>Roland Bechmann, *Trees and Man: The Forest in the Middle Ages* (New York: Paragon House, 1990), 49-50.

islands in the Western Atlantic as the laboratories of the Spanish empire. But as this chapter will demonstrate, the management of Spain's forests can teach us just as much about which ideas underlay Spanish imperialism. Conservation and the idea that "the pie was limited" were the most important ideas.

### Placing Spanish Forestry in Context

While a massive amount of literature exists detailing European environmental history broadly and the Mediterranean World more specifically, less literature exists on early modern Spain's environmental history. John T. Wing has written the most detailed description of the Spanish Crown's efforts to set aside Iberian forests for its Mediterranean and Atlantic navies.<sup>73</sup> Wing's article is important in that it shows the Spanish territorial state's first efforts to centralize power on the Iberian Peninsula. In that way, Wing's work mirrors that of Karl Appuhn. His treatment of Venetian forest conservation in *A Forest on the Sea* offers the closest comparison to Spanish forestry. According to Appuhn, the Venetian Republic led all early modern European states in forest conservation. There were certainly similarities between the two states. Like Spain, Venice juggled the needs of its domestic industries with its burgeoning naval demands. Venice relied exclusively on domestic timber and "defined the public good in opposition to unfettered economic liberty." And just like Spain, early modern Venetian forestry emerged from a "societal insularity defined by a limited resource horizon."<sup>74</sup> Early modern Spain and Venice shared a Mediterranean climate and experienced the same limits the Mediterranean imposed on societies. Finally, Appuhn Argues against a "monolithic European view" of the relationship between

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<sup>73</sup>See John T. Wing, "Keeping Spain Afloat: State Forestry and Imperial Defense in the Sixteenth Century," *Environmental History* 17 (January 2012): 116-145.

<sup>74</sup>Karl Appuhn, *A Forest on the Sea: Environmental Expertise in Renaissance Venice* (Baltimore: Johns Hopkins University Press, 2009), 29-30, 290, and 301.

humans and the natural world, namely that Europeans' relationship with nature was totally exploitative<sup>75</sup>

While Appuhn gives early modern Venice, and to a lesser extent France and England, a thorough treatment, he does not mention the contemporary efforts of early modern Spaniards.<sup>76</sup> Roland Bechmann also recognizes the ubiquity of early modern European forest conservation in France and England. For those two kingdoms, population pressure in the sixteenth century forced people to cut down more forests.<sup>77</sup> At the same time, Bechmann notes a shift over time in medieval and early modern Europe from forests as collective spaces to privately-owned spaces, and the transformation of Europe's thick forests into profitable agricultural spaces.<sup>78</sup> In this way, Bechmann's narrative mirrors the narrative of economic historians who believe that sixteenth-century Spain was a proving ground for proto-capitalism. This was not the case. Early modern Spanish municipalities, with their emphasis on communitarianism and the public good trumping private interests, demonstrated the desire of early modern Spanish society to cling to their highly-esteemed medieval traditions.

With the exception of Wing, early modern Spanish forest conservation has received scant scholarly attention. Thus, the only way to contextualize this story is to put it into dialogue with economic and political historians. Municipalities were at the center of early modern Spanish forest conservation and act as ideal locations. But like Appuhn and others, early modern Spanish historians have taken a top-down, state-centric approach to forest conservation.

A considerable body of literature discusses conservation efforts from the point of view of the Spanish crown. Carla Rahn Philips and David Goodman have detailed the emergence of

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<sup>75</sup>Ibid., 10.

<sup>76</sup>Ibid., 7-9.

<sup>77</sup>Roland Bechmann, *Trees and Man: The Forest in the Middle Ages* (New York: Paragon House, 1990), 234 and 240.

<sup>78</sup>Ibid., 49-50.

conservation regimes as part of the Spanish naval program during the late sixteenth century and early seventeenth century. In these works, *conservación* arose out of real-world concerns about resource scarcity and the burdens of being an imperial power. Charles I, and to a much larger extent Philip II, viewed the plentiful oak forests of central and northern Iberia as a precious resource whose usage required regulation. With the need for more and more timber for the Atlantic and Mediterranean fleets, the crown sought to protect and conserve this resource from the menace of deforestation. Philips and Goodman demonstrated how *conservación* functioned as a royal initiative, but they did not describe how it worked at the municipal level. While municipal officials carried out royal commands, they also passed their own conservation legislation independently. Furthermore, Goodman and Philips do not expand the scope of their studies beyond forest conservation in service of timber. Forests were not the only environments to fall under the influence of *conservación* and timber was one of many resources in need of protection. Regulations concerning pastures, pigs, and virtually every grazing animal took up a substantial amount of space in Spanish municipal conservation ordinances. The spread of conservation legislation beyond Spain's forests demonstrates that conservation discourse held a much greater sway than has been previously acknowledged.<sup>79</sup>

At the same time that conservation policies began appearing extensively throughout the Iberian Peninsula, the modern European nation-state emerged in an embryonic form as the dominant form of political power. Helen Nader posits that early modern Spain was unique among early modern nation-states because of the role municipalities played in its political organization. Municipalities were the basic political unit in the kingdom, with each having a direct line of communication to the crown. By purchasing a royal charter, a village could become

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<sup>79</sup>Carla Rahn Philips, *Six Galleons for the King of Spain: Imperial Defense in the Early Seventeenth Century* (Baltimore: Johns Hopkins University Press, 1986); and David C. Goodman, *Spanish Naval Power, 1589-1665: Reconstruction and Defeat* (Cambridge: Cambridge University Press, 1997).



a full-fledged municipality. Villages appealed to the crown to become municipalities, and the Crown gladly obliged them. Since the municipalities owed their existence to and drew political legitimacy from the Crown, royal charters strengthened the Crown's local influence. This process decentralized the kingdom by creating more and more municipalities while, simultaneously, increasing allegiance to the crown. The crown divided the entirety of the kingdom along municipal lines so that "no unincorporated spaces" existed between towns.<sup>80</sup> As Castile assimilated Andalusia into its kingdom during the fifteenth and sixteenth centuries, the monarchy continued putting municipal lands up for sale and carving out new municipalities in the newly-conquered territory.

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<sup>80</sup>Helen Nader, *Liberty in Absolutist Spain: The Habsburg Sale of Towns, 1516-1700* (Baltimore: Johns Hopkins University Press, 1990, x, 1 and 3.



Figure 1: Segment of Nicolaus Visscher map, *Hispaniae et Portugalliae regna* (c. 1640-1679).<sup>81</sup>

It was within this historical context that the Andalusian cities of Málaga, Cazorla, and Cortegana issued conservation ordinances in the latter half of the sixteenth century. While the creation of municipal councils helped the crown to control the kingdom itself, how did the municipalities exercise power over the rural hinterlands they controlled? This chapter argues that municipal councils used *conservación* as a lever of power to consolidate their hold over those rural hinterlands. In the process of claiming rural hinterlands and regulating their resources, the municipal councils acted as laboratories of empire. Municipal councils employed forest guardians, monitored timber and pasture usage, and assigned monetary value to the entire countryside. By linking rural agricultural practice with municipal bureaucratic controls, the municipalities conceptualized the countryside in urban terms. The conservation efforts of Málaga

<sup>81</sup>Map, Nicolaus Visscher, *Hispaniae et Portugalliae regna* 1640-1679, <http://www.oldmapsonline.org/map/cuni/809479>.

and other Andalusian cities demonstrated the socio-geographical reach of the municipal council and its allies at the local level. While it is true that conservation legislation existed before the sixteenth century, it remained mostly a sporadic affair, lacking the bureaucratic muscle and certainty of purpose that the legislation efforts of the sixteenth century displayed. As Spain grew and transformed into an empire, socioeconomic pressure combined with environmental vulnerability to force Spaniards into new ways of thinking about governance.

*Conservación* allowed sixteenth-century Spanish officials to imagine physical space in new ways. Aside from the social constructions of cities and royal architecture, few historians have analyzed the ways in which early modern Spaniards imagined space. *Conservación* prioritized and demarcated the natural and social worlds, favoring certain resources and occupations based upon their economic and political utility to the municipalities. The success of the municipalities' efforts depended on their ability to imagine the rural hinterlands as municipal spaces.<sup>82</sup> While royal charters theoretically eliminated any distinctions between rural and urban space, *conservación* allowed the municipal councils to integrate hinterlands into the municipality in a concrete way. Municipal efforts to consolidate rural lands mirrored later Spanish efforts to control and exploit American lands. The municipal origins of imperial logic call into question the assumption that the crown or nation-state operated as the sole creators of empire. As Henry Kamen argues, the "task of empire" helped to create a sense of political unity for early modern Spaniards.<sup>83</sup> The task of empire that Kamen describes began with the municipalities and their consolidation of the hinterlands. However, *conservación* had another function besides the expression of political power. In addition to organizing land and society in new ways, it provided

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<sup>82</sup>Ibid., 8.

<sup>83</sup>Henry Kamen, *Empire: How Spain Became a World Power, 1492-1763* (New York: HarperCollins, 2003), xxv.

a logical answer to environmental pressures. Thus, conservation legislation cannot be viewed as a simple power grab on the part of municipal councils.

When modern English readers see the word *conservation* used in policy discourse, they may naturally look back to the conservation movements that emerged in the United States during the late nineteenth and early twentieth centuries. Upon first glance, there are many similarities between modern American and early modern Spanish variants of conservation. In the United States, conservation legislation was a nationalistic enterprise, championed by nature enthusiasts and technocrats from the middle and upper-class elite. Samuel Hays wrote that one must “discard completely the struggle against corporations as the setting in which to understand conservation history.” Conservation was a scientific movement and “loyalty to these professional ideals, not close association with the grass-roots public” defined the Progressive-era conservation movement. At the heart of this movement was rational planning to promote efficient development and use of all natural resources.<sup>84</sup> And since it was a scientific movement at its heart, the political implications of conservation grew out of the political implications of applied science rather than conflict over the distribution of wealth. Thus, for modern environmental historians, conservation is often imagined as a “political system guided by the ideal of efficiency and dominated by the technicians who could best determine how to achieve it.” Federal forestry officials “campaigned for a more rational and efficient use of timber resources,” claiming that modern forestry was a wasteful industry that needed attention and federal “scientific management.”<sup>85</sup>

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<sup>84</sup>The seminal work on the conservation movement and the Progressive Movement in the United States is Samuel P. Hays, *Conservation and the Gospel of Efficiency; The Progressive Conservation Movement, 1890-1920* (Cambridge: Harvard University Press, 1959), 1-2.

<sup>85</sup>Hays, 3 and 27.

Despite the approximately five centuries that separated conservation in the United States and its early modern Spanish counterpart, there are many similarities between the two. The most important similarities are the beliefs held by the federal government and the Spanish crown, respectively. Both believed that local management of forests, if left unchallenged, would lead to wanton waste and destruction. Witness the early modern Spanish obsession with monitoring and controlling pastoralists who burned the *montes* in order to create more grazing lands. Indeed, some historians see clear links between the modern conservation ethic and early modern Spanish conservation. Henry Kamen argues that early modern Spanish rulers, particularly Philip II, were the “first ecological rulers in European history,” implying that a proto-conservationist ethic could be seen in the halls of power of early modern Spain.<sup>86</sup> These comparisons should not be carried too far. A scientific, utilitarian worldview, which viewed natural resources as a massive national storehouse, informed the American form of conservation ideology. The word *conservación*, as employed by Spanish municipal authorities in the latter half of the sixteenth century, cannot be understood in this strictly utilitarian sense. The belief that the world was a fundamentally chaotic place in which to live shaped early modern Spanish conservation. The periodic plagues and famines that visited Spanish communities constantly reminded them that their society rested precariously on the brink of starvation. *Conservación*, far from being an idealistic crusade to reap as much wealth as possible from a passive landscape, was partly early modern Spaniards’ recognition of the natural world’s power over humanity’s fate. By examining early modern Spaniards’ interactions with their environment, specialists in Spanish history can reassess old problems using new lenses. Furthermore, environmental historians can gain new insights by looking at a time and region of the world that they have left largely unnoticed.

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<sup>86</sup>Henry Kamen, *Philip of Spain* (New Haven, Connecticut: Yale University Press, 1997), 182-3.

Most historiographical discussions surrounding early modern Spain's regulation of its natural resources have taken place within either a narrowly defined top-down context, or a materialist framework which reduces Spanish subjects to mere victims. Kings needed ships for wars and treasure. The Mesta, a powerful pastoralist cooperative in medieval and early modern Spain, desired more land for its livestock herds.<sup>87</sup> Writing off early modern Spain's conservation regimes as proto-capitalist exercises in managing natural resources misses the inherent conflicts which took place wherever *conservación* was introduced. Management regimes were not monolithic; they were imagined in different ways depending on the time period and the location in which they were implemented. Conservation regimes emerged from a wide variety of motivations, not all of them having to do with the maximization of profits in the market system. Furthermore, conservation regimes were not always successful, and they did not exercise the pervasive influence that authorities would have wished. The forests and pastures of Spain were contested spaces, with various local actors attempting to ascribe their own meanings to the landscapes based on their own needs and attitudes. Forests and pastures, as experimentation sites for new forms of power and land management, are historical artifacts as powerful as literature or architecture, since they too were a historical document of a society in flux. While historians such as David Goodman and Carla Rahn Philips have demonstrated how the monarch and royal officials formulated *conservación*, historians have overlooked the role of the municipalities in the construction of the idea.

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<sup>87</sup>The decline of the "peasant way of life" in the face of pressure from the Mesta mirrors the narrative which still dominates Latin American environmental history. A vast corpus of work in the field has attempted to gauge the damage that Spanish transhumance might have inflicted on the landscape and the indigenous population. See Melville, *A Plague of Sheep*; and Andrew Sluyter, "From Archive to Map to Pastoral Landscape: A Spatial Perspective on the Livestock Ecology of Sixteenth-Century New Spain" *Environmental History* 3, no. 4 (October 1998): 508-528.

The body of this chapter consists of three municipal case-studies. The first case-study discusses the conservation ordinances that the city of Málaga proposed in 1553, paying close attention to the structure of these documents, examining the language they employed, and highlighting the essential industries that operated in the region's forests and hillsides. The second and third case-studies examine the conservation ordinances of the Andalusian villages of Cazorla in 1552, and Cortegana in 1589. While the Cazorla and Cortegana ordinances expressed similar prohibitions on the usage of timber like the Málaga laws, the analysis of the two municipalities' documents will focus upon the conservation ordinances that regulated the usage of pasturelands. Though familiar elements reoccur throughout all three sets of ordinances, this chapter will stress the different aspects of each document, emphasizing what each municipality thought was most important. The goal of this type of organization is to illustrate the unique environmental and political circumstances that helped to forge each city's conservation legislation. At the same time, this chapter will gradually piece together a broad socio-political tapestry that can be effectively labeled as a "conservation ideology." This topical division is, admittedly, an arbitrary one. Forests and pastures did not exist in isolation to one another. On the contrary, ecology and early modern Spain's social structures often linked the two environments.

### Conservation and Famine in Málaga

In 1553, Luis de Madrid, a municipal councilman (*regidor*) of Málaga, addressed the city council. He proposed a set of twenty-one ordinances for the "protection and conservation of the hillsides."<sup>88</sup> The first few ordinances identified the fruit-trees ("*arboles de fruto*") which Madrid deemed to be valuable: the Mediterranean Oak ("*henzina*"), the Cork tree ("*alcornoque*"),

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<sup>88</sup>"La guarda y conservación de los montes." See Archivo Municipal de Málaga (hereafter cited as AMM), Libro X de Actas Capitulares, f. 184v.

*chaparo*, *arebache*, and the *frezero*.<sup>89</sup> The ordinances declared that “no person of any rank” could cut or possess wood from these trees, unless that person was of a certain occupation. The carpenters and tanners had rights to wood-cutting, provided that they had a city-issued license. This license would last one year and required that applicants provide information about their intentions, including what type of tree and the amount to be cut. The ordinances intended to limit the wood’s usage to within the city’s limits and within the one year license period. All of this information would be stored in a municipal log, helping the council<sup>90</sup> in its decision to renew a license.<sup>91</sup> Finally, Luis de Madrid broadened the reach of his proposed ordinances to include Málaga’s shipbuilders, cartwrights, and charcoal-makers in his prohibition against unlicensed forest usage.<sup>92</sup>

Luis de Madrid dedicates a great portion of the document to the enforcement of these conservation ordinances. The ordinances obliged the municipal councilmen of the various villages within Málaga’s jurisdiction to employ two guards at their own cost to patrol the hillsides. In the event of capture, the forest guardians would send captured offenders to the municipality to be punished. The city’s intervention in the *montes*<sup>93</sup> went beyond licensing, however, as Luis de Madrid made a further request. A municipal councilman, or *precurador del común*, would accompany the carpenters and tanners in order to supervise their work so that the city could monitor the usage of the lumber.<sup>94</sup> In addition to watching for unlicensed *carpinteros*, Madrid also expressed concern about the slash-and-burn techniques of the charcoal makers and

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<sup>89</sup>Ibid., f. 185 and f. 185v.

<sup>90</sup>Council members could be either elected or appointed and represented all the land-owning heads of household for a given municipality. For a more detailed discussion of the historical evolution of the municipal council, see Joseph F O’Callaghan, *A History of Medieval Spain* (Ithaca, Cornell University Press, 1975).

<sup>91</sup>Libro X de Actas Capitulares., f. 185.

<sup>92</sup>Ibid., f. 185v. and f. 186.

<sup>93</sup>Castilians often used the word “*monte*” to describe both mountains and forests. See Vassberg, 36.

<sup>94</sup>AMM, f. 187-f. 187v.



the farmers. To combat this perceived destructive behavior, he advised that every citizen of Málaga “be diligent and careful” in the prevention and suppression of fires.

The disdain for forest fires was a widespread phenomenon in early modern Spain, as demonstrated by other cities such as Andújar in 1542, which took measures to protect its *montes* from fire.<sup>95</sup> These regulatory measures, employed by the authorities to maintain the value of the *montes*, reflected how the municipal councils viewed themselves, their subjects, and the land they controlled.<sup>96</sup> Controlled burning had certain benefits for pastures and forests. It rid them of undesirable seeds and elements and facilitated in the growth of new plants.<sup>97</sup> But at the same time, there were certain early modern Spanish cultural norms that painted forest workers in a negative light. Along with a general mistrust of workmen in forests, loggers and charcoal burners were often associated with brigands.<sup>98</sup> So while the burning of forests was not considered a bad thing in itself, the municipal council wanted to control it as much as possible and keep undesirable civilians from inflicting wanton destruction.

For Luis de Madrid, the forests of the city’s hillsides were a valuable resource for a number of reasons. In addition to providing timber for the naval industry and several local industries, the forests also brought economic wealth to Málaga’s populace. Functioning as a vital entrepôt between the Atlantic Ocean and the Mediterranean Sea, the port city harbored the Castilians’ Mediterranean galleys and served as a supply station to Spanish and Portuguese *presidios* (outposts) on the North African coast. This led to the development of a substantial shipbuilding industry in Málaga that became an essential element of the city’s economy. The shipbuilding industry favored oak and pine above all other wood. Shipbuilders used oak for hull

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<sup>95</sup>Vassberg, 39.

<sup>96</sup>Ibid., 37.

<sup>97</sup>Bechmann, 55.

<sup>98</sup>Bechmann, 263.

planking and internal bracing, while pine was crucial for the overall integrity of the ship's superstructure.<sup>99</sup> The naval industry was not the only entity which depended upon hillsides. Málaga relied on the trees of the surrounding hills for vineyards, a common economic staple of many Mediterranean communities. The external pressure of the Mediterranean and European markets also had a part to play. There was a great demand for the region's olives, raisins, and almonds in Europe and abroad.<sup>100</sup> Genoese and other foreign-born merchants partly made up the city's municipal leadership. Thus, the markets would always factor into any decisions the municipal council made. Many different actors depended upon the forests and each approached the forests with a different set of priorities. For Luis de Madrid, however, the problem of feeding his people seemingly outweighed all of these other considerations.

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<sup>99</sup>Phillips, 79-80.

<sup>100</sup>Faruk Tabak, *The Waning of the Mediterranean, 1550-1870: A Geohistorical Approach* (Baltimore: Johns Hopkins University Press, 2008), 18, 19-20, and 28.



### Spanish presidios in North Africa, sixteenth-eighteenth centuries

Figure 2: Starting in the fifteenth century, Portugal and the Kingdom of Castile and León captured a number of North African cities, transforming them into depots of trade and military activity in the Mediterranean. Málaga was a crucial supply station for these depots.

Madrid's proposed conservation legislation served a practical purpose because geographical and environmental conditions limited the city's sources of sustenance. Despite having a nearly unlimited supply of fish off the coast, the inability to grow grain handicapped the city. Málaga depended a great deal on overseas imports as a source of wheat. But the threat of war, freak storms, and the pirating activities of the Barbary Corsairs could doom any shipments, making this a particularly dangerous form of dependence. The same environmental unpredictability that plagued Málaga also disrupted more dependable inland sources of wheat. María Teresa López Beltrán has written extensively on Málaga's role as a "*puerto cerealista*," a nexus of Andalusian trade. The inland city of Córdoba, described by Beltrán as a "great cereal

zone,” provided Málaga with a substantial portion of its wheat. Along with imports from Jaén, Málaga had a fairly reliable inland source of basic nutrition.<sup>101</sup> But even this source of sustenance was vulnerable. Drought often struck the region and did so in 1502.<sup>102</sup> In addition to drought, plagues of locusts visited Andalusia often in the early sixteenth century, especially during 1508-9, 1542-3, and 1547.<sup>103</sup> Tough times forced the people of Málaga to search for any source of food they could find, which often meant foraging from the surrounding hillsides. Thus, Luis de Madrid viewed the preservation of the hillsides’ fruit-trees and nut-trees, especially the Mediterranean Oak (*henzina*), as vital to the survival of the city. The encina’s nut was particularly useful. It could be ground down into flour and baked into something like bread, helping to provide the city with sustenance-level nutrition for a limited amount of time until new wheat supplies arrived.<sup>104</sup>

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<sup>101</sup>María Teresa López Beltrán, *El Puerto de Málaga en la transición a los tiempos modernos* (Universidad de Málaga: Junta del Puerto de Málaga, 1986), 145 and 149.

<sup>102</sup>*Ibid.*, 155.

<sup>103</sup>Vassberg, 199.

<sup>104</sup>*Ibid.*, 38.



**Figure 3: Acorns from the Mediterranean Oak. Luis de Madrid prized these nuts for their limited nutritional value in instances of famine.<sup>105</sup>**

In the face of a multitude of environmental pressures, Luís de Madrid believed that the municipal council was the most effective political organ to alleviate the people’s suffering. His conservation ordinances were peppered with paternal rhetoric: these statutes applied equally “to the rich and to the poor” of the city and its *término* (territory under the jurisdiction of a municipality).<sup>106</sup> Throughout the document, he reminded the reader that the “common good” of the city’s citizens transcended the property rights of the seigniorial class. In this way, he was tapping into centuries’ old political sentiments. In Castile at the beginning of fourteenth century, the predominant form of geopolitical organization was the urban lordship, where a major urban

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<sup>105</sup>[https://www.geocaching.com/geocache/GC40M1C\\_quercus-ilex?guid=ec245d0b-9cbe-4399-a04d-8c179c6a34b8](https://www.geocaching.com/geocache/GC40M1C_quercus-ilex?guid=ec245d0b-9cbe-4399-a04d-8c179c6a34b8)

<sup>106</sup>AMM, Libro X de Actas Capitulares, f. 187.

center “gave economic and institutional coherence to a whole territory” composed of smaller urban and rural lordships. As royal authority increased in the following centuries, so too did the crown’s desire to exert “greater powers of coordination”.<sup>107</sup> As time passed, however, conflict began to arise within urban centers as groups of urban knights (*caballeros villanos*) began to monopolize control of urban assemblies. In response, brotherhoods (*hermandades*) of towns rose up in conflict against the urban knights, forcing Alfonso XI (r. 1325-50) to intervene in the mid-fourteenth century. This intervention took the form of the *regimiento*, a new regime in which the crown granted “a limited number of offices to be held for life” to knights and privileged elites. Every municipal council (*concejo*) in the realm replicated the *regimiento*, increasing the “jurisdictional power of the *concejos* over their villages.”<sup>108</sup> Municipal councils also found favor with Castilian monarchs as the Reconquista came to a close. The Castilian monarchs, seeking to strengthen themselves at the expense of the nobles, entrusted municipal councils with the responsibility of resettling conquered regions.<sup>109</sup> While *hidalgos* (members of the lesser nobility) still had a say in the administration of municipalities, municipal councils also exercised their power with “surprising equity,” forcing *hidalgos* to pay taxes like every other citizen for access to the commons.<sup>110</sup> Environmental change, in the form of drought and starvation, combined with centuries of political discourse to help forge a new civic identity in Málaga. Luis de Madrid, through his conservation legislation, envisioned a “community,” with the municipal council at its head, which would be ideally suited to guide the city through difficult economic times.

In the eyes of the council, the city’s survival demanded the council’s intervention.

Nevertheless, *conservación* aided in the ascension of municipal councils as a principal organ of

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<sup>107</sup>Pablo Sánchez León, “Changing Patterns of Urban Conflict in Late Medieval Castile,” *Past & Present* 195, supplement 2 (2007): 219.

<sup>108</sup>*Ibid.*, 222-4.

<sup>109</sup>Vassberg, 20.

<sup>110</sup>*Ibid.*, 33-4.

power and established a new relationship between municipalities, their leaders, landowners and the cities' surrounding environments. Bureaucracy in its embryonic stage, personified by the municipal council and its host of forest guardians, would determine which trees had value and why. This figurative and literal carving up of the *montes* would spread to other natural realms with time. The idea of conservation touched upon every occupation that interacted with the forests. But forests were not the only places which needed to be regulated. The Málaga ordinances hinted at an underlying tension between the aims of municipal *conservadores* and the livelihoods of farmers. Pastures, along with the farmers and livestock that called the pastures home, would not escape the reach of *conservación* either. For that story, the focus shifts westward to the Andalusian cities of Cazorla and Cortegana.

*Pigs and Pines: Conservation of Forests and Pasturelands in Cazorla and Cortegana*

Cazorla and Cortegana's conservation ordinances concerned themselves with protecting the nearby *montes* from roving herders and their livestock. This section of the chapter will demonstrate the expansive reach of *conservación*, as well as the wider social implications it had. It melded humans and animals alike into a new civic schematic. And as the Cazorla ordinances illustrate in great detail, local actors and traditions forced municipal planners into negotiation. Cazorla and Cortegana, like Málaga had done in 1553, issued sets of ordinances which sought to control the usage of forest resources. These documents were similar in language and content to the Málaga ordinances: the statutes applied to everyone, regardless of their social status. What is more fascinating about these documents, however, was the amount of legislation dedicated to policing the activities of livestock and their masters. Unlike Málaga's preoccupation with the *montes*, the Cazorla and Cortegana ordinances made as their top priority the conservation of

*dehesas, cotos, and heredades*—common pastures and individualized plots of land.<sup>111</sup> These passages provide further insights into how municipal councils, via conservation legislation, empowered themselves by creating new rules for human and non-human actors. Pigs and oxen, like the charcoal-makers and tanners of Málaga, could not approach the woods without considering the needs of the community.

The first ordinance of the Cortegana legislation required each citizen who brought pigs into the pasture to register his stock with the municipal authorities eight days before or after the feast day of St. Michael in late September. Offenders would have to pay a thousand *maravedís* for each unregistered pig, with the fine being split between the prosecuting magistrate (*juez*), the city of Seville, and the accuser (*el denunciador*).<sup>112</sup> The municipal council needed to know the number of pigs and their locations. But counting and monitoring domestic swine was only part of the problem. Ordinance VII of the Cortegana laws addressed wayward livestock and herders from other villages who trespassed upon the city's *término*. It stated that foreign breeders (*criadores*) who brought “hidden livestock” (*ganados secretos*) into the city's pastures must pay one hundred *maravedís* per head.<sup>113</sup> The logic of *conservación* demanded that rural space be imagined in civic terms. In a period when private property had not yet divided up the landscape completely, municipal organizers took it upon themselves to draw arbitrary lines throughout the *montes*. This pasture, or that tree, was a Corteganan tree or pasture, preserved for use by that city alone. Herders and pigs from other cities did not have rights to these areas. One had to have

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<sup>111</sup>*Cotos* were theoretically set aside for complete cultivation, whereas *dehesas* were partly set aside for pasture. But as Vassberg notes, “most *cotos* were used partly for pasture.” See Vassberg, 32, 36 and 129.

<sup>112</sup>Enrique Agudo Fernández and Isabel Polo de la Cueva, “Las ordenanzas municipales de Cortegana de 1589. Guarda y conservación de dehesas, cotos y heredades,” in: *V Jornadas del Patrimonio de la Sierra de Huelva*, Diputación Provincial, Ayuntamiento de Almonaster la Real, Almonaster la Real: 186.

<sup>113</sup>*Ibid.*, 187.



“*vecino*” (citizen) status in order to operate in the city’s pastures. This reflected the insular nature of early modern Spanish communities, where fear of foreigners informed civic discourse.<sup>114</sup>



Figure 4: The Mediterranean Oak, also referred to as a Holly Oak.

The Cazorla ordinances, in contrast to the Cortegana and Málaga laws, offered citizens more leeway in forest and pasture usage. There were the usual penalties to dole out, depending on the type of tree. The felling of *carrasca* trees (Kermes Oak) or *robre* trees (Portuguese Oak) earned offenders a penalty of six hundred *maravedís*, while the cutting of the *chaparro* (Cork Oak) was only worth three hundred *maravedís*.<sup>115</sup> The reasoning behind these differing penalties was never explained explicitly in the document, though it most likely reflected the types of nuts

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<sup>114</sup>Vassberg, 27-8.

<sup>115</sup>María Mar García Guzmán, “Unas ordenanzas de la sierra de Cazorla (1552)” *Miscelánea Medieval Murciana*. Vol. XXIII-XXIV. Años 1999-2000: 44.

each tree produced, as well as the utility of the different timbers in naval construction.<sup>116</sup> Despite the long list of prohibited activities, the Cazorla ordinances also provided an extensive list of approved activities. If a citizen possessed the proper license, the ordinances allowed for a relative amount of freedom in the usage of wood. For example, they allowed cutting for the production of crossbeams (*travesaño*), for the accumulation of fire wood, and for the construction of pig sties (*estancias de puercos*).<sup>117</sup> Following the “ancient custom” of *ramoneo*, or the cutting off of small branches for use as animal food, one could take from the forests, provided that this was done during the time of year when the trees were not producing fruits or nuts. Cazorla’s municipal planners also allowed its citizens access to the forests during times of trouble. The practice of *ramoneo*, as well as limited cutting, would be allowed under such circumstances, provided the trees were not flowering.<sup>118</sup> But when the time came for these trees to flower, the municipal council laid out a strict set of prohibitions.

The period between the feast days of Saint Michael and Saint Luke was particularly important in the growing cycles of the *montes*’ fruit. During this period, the ordinances forbid herders and their pigs to ascend the mountain for any reason. For every group of pigs (*manada*, or a dozen) that trespassed, the owners would be penalized two thousand *maravedís*. Similarly, the ordinances prohibited pig owners from knocking down and taking *henzina* nuts (*varear las enzinas*) for their animals: a fine of two thousand *maravedís* would follow.<sup>119</sup> Two sets of considerations informed conservation legislation. The first set was agricultural. The conservation ordinances ensured that the harvest of the *montes*’ valuable fruits and nuts would not be disturbed by hungry livestock. A utilitarian spirit shaped conservation legislation, but it was

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<sup>116</sup>Another explanation is that the presence of trees in a pasture provided protection against the sun and wind and water erosion. The trees were also a source of emergency forage. See Vassberg, 30.

<sup>117</sup>“Unas ordenanzas de la sierra de Cazorla,” 45.

<sup>118</sup>*Ibid.*, 45, and Vassberg, 38.

<sup>119</sup>“Unas ordenanzas de la sierra de Cazorla,” 45-6.

more complex than that. Early modern Spanish conservation, unlike more modern variants of conservation, incorporated local religious and cultural traditions into its framework. The Catholic liturgical calendar helped give it shape, linking agricultural practice with spiritual life. Along with structuring their legislation around religious holidays, municipal councils exercised care to respect traditions like *ramoneo*. This demonstrated the hybrid nature of these conservation efforts; they were not simply exercises in instrumentalist logic. Instead, municipal planners attempted to integrate tradition into the framework of *conservación*. Municipal councils, though they maintained their own economic and political goals, maintained a fundamental link to the countryside in many ways. Capitalism, the primary villain in many environmental histories, remained centuries away and played no part here. *Conservación* was distinctly an early modern Spanish idea, but also functioned as a system of control. It sought to impose a new form of order on the landscape by codifying Spaniards' relationship with the land. Conservation legislation meant the introduction of a dynamic new actor, municipal councils, onto the scene.

### *Forest History and Nature as a Victim*

This story of Iberian forests enriches the environmental history of Europe and the Mediterranean by showing how early modern municipalities were responding to particular problems. Furthermore, this story adds a much needed Mediterranean/Spanish dimension to a historiography that has not always factored in southern Europe. Since the majority of Europe's forests are not in the Mediterranean, most forest histories privilege northern and central Europe. For example, Michael Williams tied the deforestation of Europe in the early modern period with the so-called "metallurgical revolution" in the fifteenth century. As metallurgical technology made new advances, so Williams argues, metal-workers' demand for timber fuel increased

drastically. Williams locates the epicenter of this revolution in central Europe.<sup>120</sup> As with many forest histories, the implication in Williams' work is clear: in a pre-industrial society like early modern Europe, environmental degradation could be as severe as anything in the Industrial Age because so many technological processes depended on vast amounts of timber. But his theory presupposes that a given society will have access to vast amounts of timber. Early modern Spain, on the other hand, provides a scenario in which the amount of timber was limited. Williams' approach is akin to that of Rolf Peter Sieferle and his concept of energy-flow.

Sieferle's *Subterranean Forest* argues that humanity's interaction with and manipulation of energy flows has been the most fundamental process in the construction of human social formations throughout human history. While Sieferle's work effectively demonstrates the role different energy regimes have played in shaping societies, his work also reflects a tendency on the part of some environmental historians to look at human-nature historical interaction in a narrow, materialist light. This approach is problematic for several reasons. It simplifies the historical trajectory of human society to a series of discoveries or renovations—the agricultural revolution, vast timber consumption, and the discovery of fossil fuels—and ignores the cultural construction of human societies, since culture is really just a product of material (i.e. environmental and economic) factors according to this approach. In addition, describing nature solely in terms of energy flows simplifies it in such a way that it becomes a static, background historical actor, denying it the vary agency that environmental historians seek to ascribe to it.

Human relationships with nature, as described by Sieferle, never go beyond a basic need for life-sustaining energy or an incessant human desire to maximize energy outputs with new technologies like agriculture and fossil fuel burning. Sieferle's discussion of the increasing

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<sup>120</sup>See Michael Williams, "The Role of Deforestation in Earth and World-System Integration," in Alf Hornborg, John Robert McNeill, and Juan Martínez Alier. *Rethinking Environmental History: World-System History and Global Environmental Change*. (Lanham: AltaMira Press, 2007).

scarcity of wood in medieval and early modern Europe demonstrates his narrow materialistic reading of history. According to Sieferle, early modern Europeans prized the forests for their commercial uses, whether it was for glass production or for iron smelting.<sup>121</sup> He ties the usage of forest resources in with the rise of modern forms of state, arguing that what transpired in the early modern period was a move away from communal forest use to state-controlled uses.<sup>122</sup> In many ways, his analysis seems teleological, as it tells the story of the rise of European bureaucratic states, and the shift toward ever more complex, and more finite, energy regimes. We never get a sense of the interplay between natural and cultural forces. When he does tap into cultural currents to illustrate this seismic shift in energy flows, his narrow focus on Germany dilutes his overall argument, since the apocalyptic sentiments of a German jurist cannot be generalized to include Europe or humanity as a whole.

The story of Luis de Madrid and Spanish forest conservation demonstrates that the majority of scholarship surrounding forest history is problematic in a number of ways. Despite the fact that the Mediterranean's forests do not compare to Northern Europe's in sheer size, Mediterranean forests were just as vital in all the important ways northern European forest histories claim that forests shaped Northern European society. As the story surrounding Iberian forest conservation demonstrates, forests were not just important ecologically, but they were also important social spaces. Conservation legislation was not the result of impersonal bureaucratic forces imposing their will on a victimized countryside. On the contrary, conservation laws emerged from centuries of local practices and accumulated knowledge. The communitarian spirit of early modern Spain permeated these documents, meaning that forests and pastures had important social connotations in addition to their practical uses. By focusing on the social aspects

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<sup>121</sup>Rolf Peter Sieferle, *The Subterranean Forest: Energy Systems and the Industrial Revolution* (Cambridge: The White Horse Press, 2001), 61.

<sup>122</sup>Sieferle, 72-3.

of early modern Spanish forest usage, historians can also put a dent in the catalogue of declensionist narratives that dominate so much of the conversation in environmental history.

While one can see the deleterious effects of forest mismanagement in the Mediterranean today, this does not mean that there was or is a monolithic Mediterranean society that is responsible. Ancient Roman shipbuilders and Andalusian pastoralists may have operated in a similar climate and geographic region, but to treat them as coconspirators in the same crime is to ignore the social context from which each emerged. Lane Simonian attempts to describe the social milieu from which early modern Spanish environmental thought emerged, often with great success. For example, he calls attention to the Crown's wildlife conservation efforts, saying that Spanish kings "restricted the types of weapons that could be used in hunting and fishing in part to prevent the over-exploitation of animals." Towards this end, the Crown also put laws into place that would monitor the reproduction of animals.<sup>123</sup> By the time of the conquest of the Americas, he argues, "many Spaniards had demystified and disempowered nature."<sup>124</sup> The same deforestation that municipal leaders were attempting to limit via conservation legislation, Simonians posits, was being promoted by local industries and given implicit approval by the Crown. The Mesta had "the right to burn Spain's forests," while the use of wood for shipbuilding, and the burning of forests for pasturage had largely destroyed the Iberian forests.<sup>125</sup> Victimized nature has no agency and, if we follow this logic to its logical conclusion, it does not deserve to appear in our stories. Anthropocentrism, an accusatory term that environmental historians throw at other fields of history, winds up being environmental history's defining feature when so much energy is expended on declensionist narratives.

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<sup>123</sup>Lane Simonian, *Defending the Land of the Jaguar: A History of Conservation in Mexico* (Austin: University of Texas Press, 1995), 31.

<sup>124</sup>*Ibid.*, 28.

<sup>125</sup>*Ibid.*, 32.

This declensionist bent does not mean that declensionism is the only voice in environmental history. Erazim Kohák adds nuance to the debate surrounding anthropocentrism. For many, the word connotes a master-slave relationship between humans and nature. Humanity, at the center of existence, decides what has value and gauges that value based on what is useful for humans. This logic has been used to justify natural and social exploitation for millennia. As Kohák shows, this strand of thought exists under the banner of anthropocentrism but it does not represent what anthropocentrism means in its totality. Anthropocentrism, properly understood, signifies humanity's central position as an arbiter of good and value. This crucial distinction opens up alternative modes of thought and behavior for humans that a strict master-slave interpretation of anthropocentrism does not allow. We can meld our natural ability to reason with ecological knowledge and work to restore the natural world. This is an uplifting and powerful realization. As environmental historians, there is a tendency to nurture an antagonistic relationship with anthropocentrism. If we place ourselves at the center of a story, we tell ourselves, we may ignore the entire gambit of non-human forces that affect human history. But to ignore the idea that past human societies imagined themselves as the center of creation is to ignore history.<sup>126</sup>

During the sixteenth century, municipal councils converted surrounding forests and pastures into urban realms. In Cazorla and Cortegana, municipal planners prioritized livestock and pastures, like the trees of Málaga, according to the rules of *conservación*. The towns transformed pastures and forests into closely managed places where the priorities of the city council brought new order. Animals, like their human companions, could be branded as foreigners and could have their presence barred from certain spaces. The organizing tendencies

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<sup>126</sup>See Erazim Kohák, *The Green Halo: A Bird's-Eye View of Ecological Ethics*. (Chicago, Ill: Open Court, 2000).

of *conservación* made this idea logical. Once the forests had been set aside as municipal property, all human and non-human actors which interacted with them could be viewed as essentially the same in relation to the forests. They were all interlopers who, if left unchecked, would degrade the *montes* so much that they would jeopardize the integrity of the entire municipality. Luis de Madrid spoke to this sentiment, saying that some citizens had “dismantled” (*desmontar*) the countryside with their practices.<sup>127</sup> Only the steady hand of the municipal council, with its clearly articulated system of organizing the woods, could protect the “common benefit of the residents of the city” and ensure a fair distribution of resources.<sup>128</sup> The underlying assumption on the part of the councils’ actions was that resources were both fragile and finite. The councils could not completely trust citizens and their animals to uphold the integrity of the *montes* on their own.

This sentiment echoed a similar debate about mercantilism and the role of precious metals in early modern Spain. As Pierre Vilar has pointed out, the introduction of precious metals from the New World in the sixteenth century wrought profound social and political change. He shows how early modern Spaniards measured their own success and failure, using the waxing and waning of precious metal supplies as a gauge. The influx of precious metals ignited serious political and philosophical debates over the moral effects of gold and silver, and introduced new fiscal insecurities into political discourse.<sup>129</sup> This eventually led to the flowering of mercantilism in the seventeenth century. What is important for the purposes of this chapter is that a similar logic was at work in the Spanish municipalities. Spanish authorities imagined the *montes* as a vast, but finite, natural reserve. Its utility sprang from what it could provide:

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<sup>127</sup> AMM, Libro X de Actas Capitulares, f. 187.

<sup>128</sup> The Spanish phrase, as it appears in the document, is “aprovechamiento común de los vezinos desta cibdad.” Ibid., f. 186.

<sup>129</sup> Pierre Vilar, *A History of Gold and Money, 1450-1920* (London: NLB, 1976), 155-8.



nutrition, exportable cash crops, and timber for industry. The introduction of conservation practices was undoubtedly disruptive. The municipal councils' new-found sense of priority jostled for position alongside existing land-use traditions. Municipal *términos* divided up the pastoral landscape, dividing an entire system of agriculture along civic lines. In this way, sixteenth century Spanish municipalities acted as localized laboratories for mercantilist practice, an economic system which the entire Spanish state would eventually adopt as a way of preserving the wealth of its world empire. *Conservación* was a harbinger of things to come.

### Conclusion

In the world before Spain had an empire, early modern Spaniards could still afford to imagine the natural world in local, subsistence terms. The world of the late sixteenth century offered no such security. Several historical and ecological forces had converged on the Iberian Peninsula to produce a new system of legislative thought, *conservación*. It emerged as a response to real ecological crises in the form of Mediterranean aridity. As previously discussed, other Mediterranean societies such as the ancient Roman Empire or the early modern Venetian Empire coped with similar Mediterranean ecological pressures. Spanish municipalities, feeling the brunt of these ecological pressures, acted to stave off resource depletion by using the municipality's social and political power to organize people and resources. In reordering the natural landscape, municipal councils also reordered the social landscape. This story has seemingly escaped the notice of environmental historians. Elinor Melville and Andrew Sluyter, among others, have traced the exportation of Spanish social structures and agricultural practices to the New World, but few historians have discussed the socio-political and environmental context from which those

structures and practices emerged in Iberia itself.<sup>130</sup> Retracing the development of imperial social and agricultural practices to their local roots in Iberia helps to demonstrate the bottom-up construction of the imperial polity.

The need to preserve forest and pasture resources shaped the political discourse of the municipalities throughout the sixteenth century. The conservation ordinances of Málaga in 1553 revealed this in great detail. With the specter of famine and resource depletion fresh on their minds, Luis de Madrid and the other city councilmen promulgated conservation legislation as a way of adapting to the external pressures of global trade and environmental conditions. The fruit and nut-trees of the *montes* were a vital source of nutrition when imports could not reach the city. The protection of these trees necessarily conflicted with existing industries like ship-building and charcoal-making. It would be tempting to claim that the ascendance of Málaga's municipal elite was environmentally determined by the region's aridity.<sup>131</sup> After all, the history of Spain's political development and the history of Spanish municipal councils went hand in hand. In reimagining Málaga and its surrounding communities as a network, with itself as the center, the municipal council provided the best method of scratching out a living. But that was not the entire story. As Pablo Sánchez León and others have demonstrated, the socio-political thought of the municipalities stretched back to medieval Castile and had, as its foundation, an underlying discord between the traditional seigniorial class and urban leaders. *Conservación* was the latest chapter in that struggle. The environment did not determine the rise to prominence of Málaga's

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<sup>130</sup>See footnote 7.

<sup>131</sup>Donald Worster has written extensively on the subject of aridity and the rise of modern forms of bureaucracy and power as a response. His work was not environmentally deterministic, but sought to demonstrate how a preponderance of cultural and ecological factors led to the remaking of the Californian desert into a heavily irrigated American breadbasket. See Donald Worster, *Rivers of Empire: Water, Aridity, and the Growth of the American West* (New York: Oxford University Press, 1985).

city council. A confluence of environmental and political factors led to the emergence of *conservación* as a powerful organizing force in the social and political life of Málaga.

The conservation legislation of Cazorla and Cortegana demonstrated how the reach of *conservación* extended well beyond forests and trees. These documents illustrated the balancing act performed by municipal authorities. The municipal councils remained mindful of existing agricultural tradition while simultaneously seeking to impose new rules upon the countryside. They assigned an abstract value to different types of trees and valued livestock in relation to the perceived damage they inflicted on pastureland and forests. Pastoralists and farmers, in having to get city-issued licenses for their livestock to graze in the pastures, tied the animals to a specific city and region. Animals could now be considered foreigners if they belonged to herders from other cities. The municipal councils, perhaps unwittingly, had imbued these animals with a civic identity and, in doing so, integrated them into the burgeoning metropolitan network which conservation legislation helped to strengthen. The process of centralization and integration touched human and non-human subjects alike. Conservation legislation subjected animals, like their human companions, to the same arbitrary barriers drawn around Iberia's pastureland and forests. Similar to the acquisition and development of gold and silver mines in New Spain, Spanish municipalities labeled and protected forests and pastures according to a new-found sense of order.

A charge often levied against environment history is that it is thin in social theory, since what it does offer has no "predictive capacity" and that in "explaining everything in general it explains nothing in particular."<sup>132</sup> There is some truth to this statement. In introducing this dynamic new historical actor—the environment—to historical narratives, environmental

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<sup>132</sup>J.R. McNeill, "Observations on the Nature and Culture of Environmental History," *History and Theory* 42 (December 2003): 36-7.

historians have been forced to define their own place within the historical discipline. The methodological approach of this chapter, and the approach this author believes will produce an enlightening synthesis of environmental and so-called “traditional” histories, is best described by Ellen Stroud. She argues that the physical environment, unlike race, class, or gender, is not a primary signifier of power relationships but instead acts as a “site where power is expressed, and a tool for its expression.”<sup>133</sup> Spain’s forests and pastures fit Stroud’s description. Each environment carried with it centuries worth of socio-cultural baggage and each one was characterized by its own socio-cultural traditions. Forests and pastures possessed different meanings for different people and these meanings changed over time in response to various political, social, economic, and environmental stimuli. Thus, forests and pastures were simultaneously natural, cultural, *and* civic landscapes, constantly evolving along with the human society that occupied them.

One can argue that examining the environment as a “site” or a “tool” deprives the natural world of historical agency, since it assigns nature to a passive role within a larger human story. Indeed, great work remains to be done in reconstructing past ecologies in early modern Spain and examining how biological forces like evolution, climate-change, and animal migration shaped Spanish society. Environmental history has a great tradition of examining culture-nature relationships as a way of getting at power relationships within societies. It stresses the dialectical nature of environmental and political change. Most early modern Spaniards lived a subsistence-based lifestyle; famine and starvation were constant specters. Municipal conservation policy partly evolved in response to these real-world concerns. Conservation legislation, often responding to issues of life and death, exercised a powerful influence in the realm of ideas. Pigs,

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<sup>133</sup>Ellen Stroud, “Does Nature Always Matter? Following Dirt Through History,” *History and Theory* 42 (December 2003): 79.

forests, and pastures, living both as biological organisms and as social artifacts, had a fundamental impact on early modern Spanish municipal and imperial discourse. Fleshing out the nature of this impact gives historical agency to these non-human actors who have been, at best, traditionally relegated to the background in mainstream Spanish historiography.

Conservation, as practiced by early modern Spanish municipalities, calls into question a long-held dichotomy put in place by many historians between nature and culture. The forests and pastures of Spain, far from being static resource pools, functioned as experimentation sites for new ways of governance. The legislation of resources went hand in hand with the control of people. This is not a new theme in environmental history. Examining early modern Spain from this perspective, however, is new. This chapter demonstrated how early modern Spaniards' differing conceptions of nature informed socio-political discourse. There was no easy divide between urban and rural landscapes. Instead, the municipal structure organically linked the town center with its hinterlands by drawing on the Crown's patronage for political legitimacy and to reify political boundaries between towns, by deploying forest guardians to enforce the community's will, and by passing conservation legislation that applied to all citizens equally. *Conservación* strengthened this urban-rural bond by codifying it. In doing so, the municipalities irretrievably tied the countryside with their metropolitan centers.

During the same period that the Spanish Crown and municipalities were formulating conservation discourses, the first wave of Spanish conquistadors were landing across the Atlantic. Where Spain was envisioned as a hard land with limited natural resources, these men saw in the Americas an opportunity to tap into unlimited natural and material wealth. But even as the conquistadors wrote back to the Crown with reports of infinite wealth and convertible

natives, their writings also reflected the discourses of conservation and management. How would these men reconcile the ideas of infinite wealth with management?

## CHAPTER THREE

**Conquistadors and the Question of Settlement in the Americas***Introduction*

In the late fifteenth and early sixteenth centuries, Spain already had an imperial rival in Portugal, making the need to know the exact location of newly-discovered territory all the more important. The Treaty of Tordesillas (1494) divided the Americas into two spheres for Portugal and Spain, but the two kingdoms never stopped debating the exact line of demarcation.<sup>134</sup> This imperial rivalry, in part, powered the Spanish ambition to explore and chart as much of the New World as possible. While the Iberian Peninsula's semi-arid environment helped to shape Spain's domestic policies, particularly in terms of forest conservation policies, early Spanish thought about the environment of the Americas swung in another direction. Everywhere, conquistadors wrote about the potentially limitless riches of the New World and how the Crown could, with more funding for more expeditions, fill its coffers and could bring the Catholic faith to new subjects. But as this chapter will reveal, early modern Spanish ideas on conservation and on the importance of towns followed the conquistadors across the Atlantic Ocean. In the face of potentially boundless resources, conservation and management did not disappear; they simply took on a new face amidst altered circumstances.

Every chapter of this dissertation continually returns to a central question: how did early modern Spaniards envision a relationship between humanity and nature when the Spanish empire was at the height of its power? This question is important because, as environmental historians like Eleanor Melville and Alfred Crosby have so ably demonstrated, there was a concrete link

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<sup>134</sup>Maria M. Portuondo, *Secret Science: Spanish Cosmography and the New World* (Chicago, University of Chicago Press: 2009), 5.

between early modern Spaniards' environmental thought and the exercise of imperial power. But Crosby, Melville, and much of the historiography have argued that early modern Spaniards' had one attitude, or one relationship, with the environment: the Spaniards and their livestock arrived in the Americas and wrought destruction and exploitation. The literature treats the killing of Amerindians and destruction of their societies as a planned, deliberate act on the part of the Spaniards. On the other hand, the literature also treats the importation of sheep and the spread of deadly Eurasian disease as an unconscious process, a deadly accident of history that played a decisive role in completing the Spanish victory. The underlying assumption in Crosby and Melville's work is that we can reduce early modern Spanish environmental thought to a monolithic whole; throughout the entire period of the conquest and beyond, early modern Spaniards had a utilitarian, extractive view of humanity's relationship with nature.

While Crosby and Melville's narrative was powerful because it introduced animals and disease into the Spanish imperial narrative, this narrative treats the relationship between humanity and nature in this time and place—the Spanish empire during the sixteenth century—as essentially static from an intellectual perspective. But as was the case throughout the early modern period, Spanish environmental thought was highly variable depending on particular circumstances. While no one can dispute that Spanish actions in the Americas had destructive ramifications for the native peoples and environment, even the conquerors with the worst track records like Hernán Cortés did not imagine their activities as being inherently destructive. Rather, they organized the societies and environments they found on a spectrum of civilization, and all of their actions and observations in the Americas were organized around the notion of finding order in the chaos that was the American continent.



Crosby argues that Europeans derived their biological advantages from prolonged interaction with livestock over millennia. But as the Spanish conquest and settlement of Mexico demonstrates, early modern Spaniards were also “city” people and “farming” people. The need for municipal governance and the ability to cultivate new lands factored heavily in the minds of conquistadors in the Americas. Together, farming and city-living formed a set of ideas that early modern Spaniards conceptualized as “civilization.” On the surface, Cortés’ own writings on the conquest of Mexico sound like the classic civilizing mission. But this emphasis on civilization is more important than it appears at first glance; the conquistadors believed they were searching for civilization, and they wanted to import civilization where necessary. The conquistador accounts of the conquest of the Americas indicate that the conquistadors did not merely seek to erect an extractive economy built on the backs of indigenous labor and precious metals. Rather, the conquistadors believed in an ideal balance between civilization and nature, a balance that could be maintained through prudent governance and human labor via farming.

Eleanor Melville covers the topic of livestock and Spanish colonialism most explicitly in *Plague of Sheep*. Melville focuses on the human side of conquest in addition to livestock, arguing that encomenderos, missionaries, and royal officials were the “classic troika of Spanish conquest and settlement.”<sup>135</sup> It was these men who started importing Old World agricultural practices in hopes that the American landscape would eventually conform to “their ideas of lands and economic potential.” Her take on pastoralism—the dominant form of agriculture in central and southern Iberia characterized by migratory ungulates like sheep and common grazing grounds—is that pastoralism was “a completely alien perception of the natural resources and their use” to newly-conquered Amerindians.<sup>136</sup> Encomenderos, missionaries, and royal officials

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<sup>135</sup>Melville, 44.

<sup>136</sup>Melville, 8, 47, 117 and 119.

extended pastoralism in the Valle del Mezquital by combining “legal resource exploitation, illegal land grabbing, and force.”<sup>137</sup> She is correct that, to the indigenous peoples of the Americas, the Spaniards and their sheep must have seemed like invaders from another planet. But to the Spaniards themselves, the sheep were the complete opposite of *alien*. Chapter one of this dissertation demonstrated how municipalities, livestock, and pastoralism became so wound up in the sociopolitical fabric of everyday life for early modern Spaniards; chapter two tells the story behind the environmental language carried by Spaniards to the Americas by showing how the *familiarity* of Spanish institutions (municipalities) and desirable forms of wealth (mining and agriculture) helped determine early modern Spanish colonial strategies.

As Crosby notes, Spanish success in the Americas depended upon success of livestock; Europeans were “livestock people.”<sup>138</sup> This statement carries more weight than Crosby gives it, however. Early modern Spaniards were not just livestock people in the sense that they had evolved biologically with livestock for thousands of years; the Spaniards were also livestock people because so many of their ideas about nature revolved around the idea that livestock were beneficial and important parts of the community. Karl and Elizabeth Butzer have contextualized the early modern Spanish affinity for herd animals. Herd animals need heavily cultivated fields and room to forage. The lifestyle of these herd animals naturally led to socio-environmental tensions at different points in Spanish history, especially between 1450 and 1600 as more land became available for grazing from settling reconquered lands. The goal of the resettlement of Granada was not to displace existing inhabitants but rather to resettle abandoned or vacant land. The Spaniards, thus, associated land ownership and the ability to use that land effectively with

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<sup>137</sup>Melville, 116.

<sup>138</sup>Crosby, 140, 172, and 174-6.

the ownership of livestock. Since indigenous peoples in the Americas did not own livestock, they lacked a claim to communal lands.<sup>139</sup>

This chapter begins by analyzing Christopher Columbus' own logic when it came to colonization. Thanks to his advisors and the chroniclers who followed him to the New World, Columbus' thinking reflected several medieval ideas about the origins of creation and the place of the New World within that creation. The chapter then switches focus to the writings of Georgius Agricola. Then, it analyzes the Hernán Cortés' conquest of Mexico, focusing specifically on his observations of the Mexican landscape as he approached Tenochtitlan. Finally, the chapter ends with the Spanish Crown's efforts to rein in the activities of the conquistadors and to maximize the wealth of the Americas while protecting its indigenous peoples.

### The Medieval Worldview

According to the Ptolemaic worldview, certain areas of the world were considered uninhabitable for "cosmic reasons." There were five heavenly zones: two polar, two temperate, and one intermediate or tropical zone. The "World" only occupied the northern strip which included Europe, Asia, and North Africa. This was the so-called "Ecumene," or inhabited world.<sup>140</sup> Dating back to the thirteenth century, an influx of Latin and Arabic sources, such as Geminus of Rhodes' *De dispositio sphaerae*, supported the idea that the torrid and southern temperate zones were suitable for life. Bartolomé de Las Casas, who wrote extensively about Columbus and his voyages, drew heavily from Albertus Magnus' *De natura loci* (1251-1254).

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<sup>139</sup>Butzer and Butzer, 151-3.

<sup>140</sup>Edmundo O'Gorman, *The Invention of America; An Inquiry into the Historical Nature of the New World and the Meaning of Its History* (Bloomington: Indiana University Press, 1961), 62-3; and Worster, *Second Earth*, 12-3.

Magnus was one of the earliest medieval Christian authors to argue that the intermediate tropic zones were inhabitable by people. Albertus Magnus believed that certain people were tied to certain climes or latitudes and that, should a person be removed from his particular latitude, illness and infirmity would follow.<sup>141</sup> Bishop Diego Deza, a chief patron and follower of Columbus, introduced Columbus to Magnus' work.

Albertus Magnus and his contemporaries believed that a “timeless and boundless” God created the universe *ex nihilo* and continued “to govern and care for all its creatures.” The universe was both perfect and finite. God solely could create out of nothing (“first form”), but it was the purview of Nature (“second form”) to generate new creation from God’s already-existing work. The “universe is God’s and for God.” The “world” was a physical location, but also a moral and spiritual order.<sup>142</sup> After Adam and Eve caused the fall of humanity in the Garden of Eden, humanity entered into the “world of the Fallen,” one that no longer sheltered “an orchard of delights and abundance, but an inclement vale of tears.” This fallen world challenged man’s capacity to act and limited humanity’s ability to affect the cosmos. Medieval people were yet unable to imagine their own ability to transform the universe into a world of their own. The discovery of the Americas would cause this line of thought to shift during the sixteenth and seventeenth centuries.<sup>143</sup>

The Americas represented a possible way out of the “age-old prison” of the fallen world.<sup>144</sup> Oviedo wondered whether or not the Americas could possibly be the “Terrestrial Paradise,” the long-lost Garden of Eden. After the Europeans arrived in the Americas, they came

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<sup>141</sup>For a more detailed description of how Albertus Magnus rejected or modified Aristotle’s notions of matter, physics of motion, and nature, see Nicolás Wey Gómez, *The Tropics Of Empire: Why Columbus Sailed South to the Indies* (Cambridge, Mass: MIT Press, 2008), 243 and 252-3.

<sup>142</sup>Wey Gómez, 231-3 and 240, and O’Gorman, 52 and 61.

<sup>143</sup>O’Gorman, 63-5.

<sup>144</sup>O’Gorman, 86-7.

to view the universe as a “vast, inexhaustible quarry of cosmic matter” and they believed men’s efforts could shape it. While the Old World was the part of the Earth “providentially assigned to man for his dwelling,” the New World could enlarge man’s cosmic home.<sup>145</sup> This reflects Worster’s argument that the idea of a “Second Earth” represented a doubling of the world’s resource base. Integrating the New World into the Old would eventually empower the “older civilizations with new natural resources and the freedom those resources made possible.”<sup>146</sup> This was the medieval intellectual context in which Columbus arrived in the Caribbean in 1492 and it spawned a number of intellectual responses in Europe.

Columbus’ “discovery” was received with a variety of intellectual responses by Spanish authors. Gonzalo Fernández de Oviedo y Valdés (1478-1557), historian and naturalist, was among the first to describe Columbus as the “discoverer” of the Americas. This assertion obscured Columbus’ original idea that he had found Asia. Las Casas believed Columbus’ discovery was part of God’s divine plan. In his estimation, Columbus acted freely within the “framework of the natural world” and that the discovery was not a divine revelation, but rather successfully-proven hypothesis on Columbus’ part. America had supreme importance for Las Casas because it had a multitude of souls to save.<sup>147</sup> Each of these various intellectuals was attempting to paint the Americas in the light of Old World epistemologies.

### *The Case for American Wealth*

At first glance, Christopher Columbus and Georgius Agricola would seem to have little in common. The former is one of the most infamous explorers and conquerors in world history, responsible for introducing unimaginable horrors to the indigenous peoples of the Americas and

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<sup>145</sup>O’Gorman, 129 and 139.

<sup>146</sup>Worster, *Shrinking Earth*, 12-3.

<sup>147</sup>O’Gorman, 13-6, 16-8, and 19-20.

extending Spanish dominion to the Western Hemisphere. The latter was a little-known German scholar who specialized in mineralogy and whose most famous work, *De re metallica*, came five decades after Columbus' conquests. Nevertheless, both men believed in the inherent goodness of American wealth and the benefits it could bring to European society. The difference between the two men came in their argumentation: while Columbus sought personal gain and argued for further conquest in the name of bringing glory to the Spanish Crown, Agricola was making the case for mining more broadly as a healthy source of wealth. The Spanish *arbitristas* and economists would later take these positive conceptions of American wealth to task.

Christopher Columbus, thinking he was nearing India and the riches of Asia, instead found himself on the island of Hispaniola in 1492. Once it became clear that the Caribbean Islands were not part of India but were instead part of an entirely different continent, Columbus immediately moved to bring Spanish government and economic management to the islands. In order to get additional funding for more voyages, Columbus had to prove that these lands could be controlled and that they were profitable. As Elvira Vilches notes, Columbus had to couch his language in the terms of gift-giving if he hoped to convince the Crown. Thus, he spoke of the Caribbean islands as a "boundless gift bestowed upon and Ferdinand and Isabela by the Lord" and received by himself. The practice of gift-giving mirrored the way in which the Crown had divided up Andalusian lands after the Reconquista. Though the conquered land technically belonged to the Crown, the Crown allowed municipal councils to buy that land and gain a form of political autonomy. Gift-giving helped to order medieval Castilian society and complimented the profit-oriented commercial economy that would soon emerge in the Atlantic.<sup>148</sup>

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<sup>148</sup>Elvira Vilches, *New World Gold: Cultural Anxiety and Monetary Disorder in Early Modern Spain* (Chicago: University of Chicago Press, 2010), 65.

Columbus' venture was the first of the India companies. He maintained all authority in governing new territory, while legally, he and the Crown held a monopoly. Carl Sauer describes the Caribbean political economy at this time as "brutally simple." Columbus established a rudimentary political and economic organization on Hispaniola to mine gold. On Santo Domingo, gold was the sole export of the island while Columbus was alive. It would be established later during the governorships of Columbus' successors, Francisco de Bobadilla and Nicolás de Ovando, that all minerals were to be considered property of the Crown with the regional governors giving rights for exploitation. Ovando ordered on September 16, 1501 that Christians were not to live dispersed throughout the island, but in fortified settlements for protection.<sup>149</sup> The extraction of gold was the main goal of early Spanish conquests and the political organization of the Caribbean territories reflected this.

In 1494, Columbus wrote a letter to Isabela and Ferdinand in which he proposed a set of regulations for the exploitation of Hispaniola. Columbus' letter reflected his desire to establish order on the island immediately in the form of cities and bureaucracy. First, he requested that "for the better and more speedy colonization of the said island, no one shall have liberty to collect gold in it except those who have taken out colonists' papers, and have built houses for their abode, in the town in which they are, that they may live united and in greater safety." Columbus' couched his desire to collect gold not in terms of collecting personal wealth, but rather in the desire to help a unified community of colonists to collect wealth. Columbus wanted to extract as much gold as possible from the island, but he wanted it done in an orderly fashion. Thus, he requested that "none of the colonists shall go to seek gold without a license from the governor or *alcalde* of the town where he lives." Any colonist that wanted gold also had to take an oath to "return to the place whence he sets out, for the purpose of registering faithfully all the

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<sup>149</sup>Sauer, 70, 72-82, 104, 105, and 150-1.

gold he may have found, and to return once a month, or once a week, as the time may have been set for him, to render account and show the quantity of said gold.” Finally, he asked that “all the gold thus brought in shall be smelted immediately, and stamped with some mark that shall distinguish each town; and that the portion which belongs to your Highnesses shall be weighed, and given and consigned to each *alcalde* in his own town, and registered by the above-mentioned priest or friar, so that it shall not pass through the hands of only one person, and there shall be no opportunity to conceal the truth.”<sup>150</sup>

Columbus’ letter was ultimately self-serving in that he wanted to continue enriching himself in the Caribbean, but his rhetoric nevertheless reveals certain beliefs on his part. By recording the amount of gold extracted from the island in an accurate manner, Columbus sought to convince the Crown of his good governance and to demonstrate the island’s overall worth. By founding a city and holding its citizens accountable, extracting gold became another communal venture, not so different in nature from the efforts of the Spanish municipalities to assess and protect their agricultural wealth. Finally, a city council’s ledger, replete with accurate mining figures and possessing its own coinage, would be more convincing than Columbus’ words. Columbus described mining within the context of municipal communities and expanding the power of the Crown. Georgius Agricola, on the other hand, was addressing an elite, early modern European intellectual audience more broadly.

Agricola’s *De re metallica*, published in 1556, emerged in response to anti-mining and anti-American metal sentiments that arose in Europe as the Spanish empire’s exploits in the Americas filtered into the continent. Agricola’s central premise was that mining was just as ancient and required just as much specialization as agriculture. Agricola reflected the narrative

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<sup>150</sup>Letter, Christopher Columbus to King and Queen of Spain, 1494  
(<http://faculty.sanjuanacollege.edu/krobison/documents/Columbus-SpMonarchs.htm>).



style of his Renaissance Humanist contemporaries by locating mining's legitimacy in the grand sweep of history. He argued that "none of the arts is older than agriculture, but that of the metals is not less ancient; in fact they are at least equal and coeval, for no mortal man ever tilled a field without implements. In truth, in all the works of agriculture, as in the other arts, implements are used which are made from metals, or which could not be made without the use of metals; for this reason the metals are of the greatest necessity to man. When an art is so poor that it lacks metals, it is not of much importance, for nothing is made without tools." Agricola made the canny observation that agriculture had long been divorced from bare human effort. Instead, human societies had always harnessed technology to multiply their efforts, particularly in the arena of agriculture.



A—TWIG. B—TRENCH.

Figure 5: An illustration from *De re metallica*. By emphasizing the expertise required to pull off a successful mining operation, Agricola sought to convince the reader of mining's overall utility and innate goodness.<sup>151</sup>

<sup>151</sup> Georgius Agricola, *De re metallica* (1556), <http://www.gutenberg.org/files/38015/38015-h/38015-h.htm>, 40.

Agricola believed that mining could provide tangible, practical benefits to its practitioners. In the first place, he says that “of all ways whereby great wealth is acquired by good and honest means, none is more advantageous than mining; for although from fields which are well tilled (not to mention other things) we derive rich yields, yet we obtain richer products from mines; in fact, one mine is often much more beneficial to us than many fields.”<sup>152</sup> This was the one of the opening salvos in the debate early modern Europeans would have throughout the sixteenth century over precious metals and agriculture. For Agricola, the benefits of mining and metals were self-evident, but he knew that he would have to ground his rhetoric in the language of utility and the common good if he hoped to convince his readers.

Although Agricola was not speaking to the same audience as Columbus, he made similar arguments in defense of mining. Beginning with the “question of utility,” he gauged the quality of mining by “whether the art of mining is really profitable or not to those who are engaged in it, or whether it is useful or not to the rest of mankind.” Just as Columbus believed that gold mines should be a communal affair, Agricola recognized that the detractors of mining characterized mining as deleterious to individuals, to communities, and to the environment. One argument against mining, according to Agricola, was that it offered no advantage to the men who engaged in it: “scarcely one in a hundred who dig metals or other such things derive profit therefrom.” Another argument he addressed was that mining was not a sustainable economic venture. It forced men to “entrust their certain and well-established wealth to dubious and slippery fortune, [to] generally deceive themselves, and as a result, impoverished by expenses and losses, in the end [to] spend the most bitter and most miserable of lives.”<sup>153</sup>

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<sup>152</sup>Ibid., xxvi.

<sup>153</sup>Ibid., 4-5.

Finally, Agricola states that the “strongest argument of the detractors is that the fields are devastated by mining operations, that the woods and groves are cut down, for there is need of an endless amount of wood for timbers, machines, and the smelting of metals. And when the woods and groves are felled, then are exterminated the beasts and birds, very many of which furnish a pleasant and agreeable food for man. Further, when the ores are washed, the water which has been used poisons the brooks and streams, and either destroys the fish or drives them away. Therefore the inhabitants of these regions, on account of the devastation of their fields, woods, groves, brooks and rivers, find great difficulty in procuring the necessaries of life, and by reason of the destruction of the timber they are forced to greater expense in erecting buildings.”<sup>154</sup> Agricola’s answer to this vast criticism was to divorce the deleterious effects of mining from the innate goodness of metals. He could “see no reason why anything that is in itself of use should not be placed in the class of good things.” Since metals were “a creation of Nature, and they supply many varied and necessary needs of the human race,” it was not right to degrade them from the place they hold among the good things. The use of a thing was irrelevant to Agricola: “if there is a bad use made of them, should they on that account be rightly called evils? For of what good things can we not make an equally bad or good use?”<sup>155</sup> Agricola’s defense of mining reflects the continuous debate early modern Europeans were having about the nature of American wealth. Columbus’ own rhetoric foreshadowed the ways in which Cortés and the Crown would discuss the administration of their burgeoning colonies.

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<sup>154</sup>Ibid., 8.

<sup>155</sup>Ibid., 18.

*The Conservation of Peoples and Nature in Cortés' Expeditions*

What were the markers of civilization according to the Spanish Crown and to the conquistadors? The Laws of Burgos, promulgated in 1512, demonstrate that the Crown had two somewhat contradictory mindsets when it came to the governance of newly-conquered indigenous peoples. On the one hand, the Crown wanted the conquistadors to treat their new subjects with decency and to provide them with basic human rights. This would make easier the process of evangelization and solidify Spanish rule in the hearts and minds of the indigenous peoples. But at the same time, indigenous labor powered Spain's burgeoning mining industry. The Crown attempted to reconcile the dual needs of indigenous souls and bodies by arguing for the conservation and increase of indigenous peoples.

The organization of communities and the conservation of resources were essential markers of an ordered society. Thus, by managing indigenous populations and dividing up labor, the Spaniards were putting them on the path to civilization. The Laws of Burgos dealt with the settlement and treatment of indigenous peoples of the Caribbean Islands, especially Hispaniola. First, the Laws sought to settle indigenous peoples closer to Spanish communities for the purposes of managing their labor and evangelization. The Crown argued that "the principal obstacle in the way of correcting their vices...is that their dwellings are remote from the settlements of the Spaniards." This was problematic for the Crown because Spanish culture could not stick so long as indigenous peoples returned to their home villages after their service had ended. The Crown believed that the indigenous peoples would "immediately forget what they have been taught and go back to their customary idleness and vice."<sup>156</sup> Thus, the Crown viewed

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<sup>156</sup> "...tener sus ayentos y estancias tan lexos como las tyenen...os todos de sus lugares donde viben los espanoles..." *Laws of Burgos*, 1512.

Spanish cities as agents of civilization and order; mere proximity to such a place would instill culture and insure smooth economic activities.

With the goal of fortifying Spanish culture in mind, the Crown ordered the resettlement of indigenous peoples into Spanish communities. By “continual association with them, as well as by attendance at church on feast days to hear Mass and the divine offices, and by observing the conduct of the Spaniards, as well as the preparation and care that the Spaniards will display in demonstrating and teaching them...the things of our Holy Catholic Faith, it is clear that they will the sooner learn them.” The Crown couched this forced relocation in humanitarian terms, arguing that “if some Indian should fall sick he will be quickly succored and treated, and thus the lives of many, with the help of Our Lord, will be saved who now die because no one knows they are sick.”<sup>157</sup> In the first ordinance of the Laws of Burgos, the Crown offers some compensation for the relocations: “the persons who have the said Indians in their charge shall have them sow, in season, half a *fanega* of maize, and shall also give them a dozen hens and a cock to raise and enjoy the fruit thereof...and as soon as the Indians are brought to the estates they shall be given all the aforesaid as their own property...in exchange for what they are leaving behind, to enjoy as their own property.”<sup>158</sup> Already in 1512, the Spanish Crown was very interested in protecting the indigenous population for the purpose of increasing their numbers.

The word “*conservación*” itself does not come up until Ordinance Two, where the Crown urges its colonial subjects to carry out the relocations with “much care, fidelity, and diligence, with greater regard for the good treatment and conservation of the said Indians than for any other respect, desire, or interest, particular or general.”<sup>159</sup> Good treatment and conservation are treated

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<sup>157</sup>Laws of Burgos, 1512.

<sup>158</sup>*Laws of Burgos* Ordinance I, 1512.

<sup>159</sup>“...con mucho cuydado fydelidad e diligencia teniendo mas fin al buen tratamiento e conservacion de los dhos yndios que a otro ningun respecto ni ynteresse partycular ninguno.” *Laws of Burgos*, Ordinance II

as a singular idea here. But how were the Spanish overlords supposed to treat indigenous peoples well while still maintaining the burgeoning mining and plantation industries on the islands? This question was the central concern in most of the Burgos ordinances. As Ordinance Eleven pointed out, geography and logistics were complicating the relocations, as well as the movement of people and supplies to the mines. With no native pack animals to carry the heaviest supplies, conquistadors were using some indigenous peoples as pack mules. Ordinance Eleven sought to curb this practice by placing the burden on the indigenous people actually working in the mines. This demonstrated that the Crown were hardly saviors in terms of helping indigenous peoples avoid abuses. Rather, they sought to divide up labor in the most optimal fashion.

In addition to the livestock and produce provided to indigenous peoples as compensation for their relocations, the Crown wanted conquistadors to provide basic sustenance to the people in their charge. It should be noted that, though the Crown wanted Indians treated with care, it had few means to enforce their good treatment.<sup>160</sup> Ordinance Fifteen once again stressed the “good treatment and increase of the Indians,” and their “subsistence” was key: “we order and command that all persons who have Indians shall be obliged to maintain those who are on their estates and there to keep continually a sufficiency of bread and yams and peppers, and, at least on Sundays and feast days, to give them dishes of cooked meat.”<sup>161</sup> The indigenous peoples would not produce at an optimal level if they were malnourished or did not have their basic needs met. The fact that the Crown was most interested in increasing and maintaining a healthy indigenous population was reinforced by Ordinance Twenty-Three. This ordinance informed *encomienda* that royal officials would be visiting the *encomiendas* to take censuses of indigenous

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<sup>160</sup>Sauer, 150.

<sup>161</sup>“Otrosy por que en el mantener de los yndios esta la mayor parte de su buen tratamientoo e avmentacion hordenamos e mandamos que todas las personas tuieren yndios sean obligados de los que estuieren en las estancias...” *Laws of Burgos*, Ordinance 15.

populations. Similar to the royal forest officials who maintained the kingdom's supply of timber, these officials were to be meticulous in their record-keeping: encomenderos were obliged "to give an accounting to the visitors, within ten days, of those who die and those who are born; and we command that the said visitors shall be obliged to keep a book in which to enter every person who has Indians in encomienda, and the Indians that each one has, with their names, so that those who are born may be entered, and those who die removed, and the visitor have continually a complete record of the increase or decrease of the said Indians."<sup>162</sup>

For Cortés, the presence of sizeable cities with large populations was important, as well as a region's ability to be economically and agriculturally viable. Cortés, Pizarro, and the other conquistadors were wrestling with the same question confronting their contemporaries on the Iberian Peninsula: who should manage wealth and how should that wealth be used? Like had been the case when the Kingdoms of Castile and Aragon parceled out Moorish lands during the Iberian Reconquista, Spaniards who were settling the Americas did so using a variety of strategies that reflected particular circumstances. This problematizes any narrative concerning Spanish imperialism which argues that Spanish imperialist thought and policy was monolithic. In the literature on Spanish settlement, destruction has two meanings. The first meaning is the destruction of indigenous landscapes via the importation of Eurasian livestock and the extraction of precious metals. Scholars who trace this line of thought, like Eleanor Melville and Andre Gunder Frank, reason that the destruction of the indigenous landscape and the reorganization of indigenous society helped the Spanish invaders to uproot indigenous ways of life and consolidate

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<sup>162</sup>“Otrosy ordenamos y mandamos que todas las personas q touieren yndios en encomienda asy de los de la dha yslla española como de los de las yslas. comareanas se truxiere sean obligados a tener quenta a los visytadores de los que se les moriere e de los que nacieren dentro de dies dias e mandamos que los dhos visytadores sean obligados de tener e tengan vn libro en q tengan quenta e rason con cada per-sona que touie yndios de Repartimio y declara en el que yndios tyene cada vno e como se llaman por sus nombres pa que los nacidos se asynten y los muertos se quiten porq contyno el visytador tenga Relacion enta sy crecen o disminuyen los dhos yndios...” *Laws of Burgos*, Ordinance 23.



their own control in the Americas. The warping of the indigenous landscape was also part of a broader cycle of Spanish-wrought destruction which culminated in a massive indigenous demographic decline and widespread pillage and abuse.

While the horrors perpetrated by the Spanish during the conquest of the Americas were all too real, it is a simplification of history to pretend that the Spanish arrived in the Americas with one mindset or one strategy for imposing their rule and settling the land. Scholars have long demonstrated the differences of opinion held by men like Bartolomé de Las Casas in regards to the treatment of indigenous peoples. But the idea has persisted that early modern Spaniards had a monolithic set of beliefs about how to interact with the environment. Instead, as this chapter will demonstrate, early modern Spaniards came to the Americas wrestling with several ideas about how to settle their newly-acquired territories.

When conquistadors first arrived, they relied on the institutional power of the municipality to provide legitimacy to their territorial claims. It must not be lost on the reader that many in Spain considered the conquistadors upstarts. The conquistadors wanted to transcend their social status and become lords in their own right. Founded by Francisco Pizarro in 1535 as the “Ciudad de los Reyes,” Lima was one of many cities established by Iberians in the Americas in an attempt to grant themselves political legitimacy and to bring order to the countryside. Hernán Cortés founded Veracruz in Mexico for similar purposes. Later, encomiendas emerged with the need to reward conquistadors and their followers. The founding of cities and encomiendas was not merely a prepackaged, monolithic set of Spanish beliefs about how land should be organized. Rather, they were a specific set of responses to different situations. The same could be said for another form of land organization which manifested itself in the city of Puebla, founded in 1531 the Valley of Cuetlaxcoapan. This city, designed as an alternative to the

encomienda, was founded with agricultural labor and values in mind. A city of agricultural laborers, free to work of their own volition, would live up to the farming ideals espoused by the emperor, Charles V. The variety of options early modern Spaniards had for land settlement points to a society which held many different, often conflicting, views about how civilization and nature should interact.

As the first chapter on Iberian municipal forest management argued, municipalities were a key political institution on the Peninsula during the early modern period. This did not change once Spain claimed sovereignty over the Americas. Cities were a pivotal part of Spanish imperialism in several ways. First and perhaps most importantly, they legitimized conquest claims and provided a legal channel by which settlers in newly-acquired territory could have access to the crown. It was in this respect, Gilberto Rafael Cruz argues, that "...the town was a faithful copy of its Iberian antecedent" in that it helped to create a plan "for permanent land tenure."<sup>163</sup> As was the case on the Peninsula, towns were the most basic element of political organization, effectively absorbing American lands into the Spanish realm. Second, and especially during the early conquest period, the ability to shroud oneself in the legal fiction of a municipality provided invaluable political capital to ambitious conquistadors.

There are several case-studies that would be useful for telling the story of municipalities in the Americas. Perhaps the most famous example of the municipality's efficacy as an agent of empire was the founding of Veracruz by Hernán Cortés and his expedition in 1519. The political infighting between Cortés and the governor of Cuba, Diego Velázquez de Cuéllar, is a well-known story in the early history of Spanish settlement in the Americas. In order to break off from Velázquez's control and legitimize his own expedition, Cortés founded Veracruz and

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<sup>163</sup>Gilberto Rafael Cruz, *Let There Be Towns: Spanish Municipal Origins in the American Southwest, 1610-1810* (College Station: Texas A & M University Press, 1988), xii.

immediately formed a *cabildo* to represent Veracruz's interests. The "largely fictitious" council of Veracruz could then appeal to the king and grant Cortés permission to explore the Mexican interior. While the town itself may have been little more than a beachhead at the time, the authority it wielded was portrayed as being very real.

When Cortés founded Veracruz, he was not so much blazing a trail of insubordination as he was following established conquest procedure. Drawing precedent from the Reconquista, there were very legalistic measures in place to consolidate a territory, the most basic being a formal territorial claim and the founding of a town. For Spaniards, city-dwelling was equated with "civilization, social-status, and security." It was the means by which a *cabildo* could be formed and order could be instituted. The founding of Veracruz effectively replaced the authority of the governor of Cuba, and allowed Cortés conquest of Mexico to proceed unabated. The towns of Santo Domingo and Havana had been established under similar circumstances, with the added irony that it was Velázquez himself who had founded Havana.<sup>164</sup>

One of the arguments against this chapter's narrative would be that it is a one-sided telling of the events, since it only accounts for the perspective of the conquerors. While this dissertation does not feature indigenous voices, it does underline the ways in which early modern Spanish environmental language and their burgeoning emphasis on observation simultaneously included indigenous peoples in the picture while absorbing them into a Eurocentric point of view. In Patricia Seed's essay about the Incan emperor Atahualpa and his fateful encounter with Pizarro, she sheds light on the early modern Spanish belief in the cultural supremacy of the written word. She argues that this belief colored the ways in which the story was written by later historians. For Seed, the book was the "emblematic representation of Western religion and

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<sup>164</sup>Matthew Restall, *Seven Myths of the Spanish Conquest* (New York: Oxford University Press, 2003), 18-20; Hernán Cortés, *Letters from Mexico*, trans. Anthony Pagden (New Haven: Yale University Press, 1986), lii.

culture.” She challenges the validity of “first-hand accounts” and realist narratives by juxtaposing them alongside accounts of the Incan conquest written by indigenous authors.<sup>165</sup> But it is precisely because the written word was so powerful—and a tool that Cortés and the other conquistadors used—that it is so important to examine the sorts of things the conquistadors and cosmographers chose to include in their reports to the Crown.

### Spanish Experiments with Settlement

As Hanns Prem demonstrates, Spanish landowners and farmers experimented with different ways of consolidating and extracting agricultural wealth from newly-acquired indigenous lands. Compared to the small chiefdoms of the Caribbean (*cacicazgos*), the Aztec empire provided an existing political and economic infrastructure on which to consolidate Spanish control. In the immediate aftermath of the conquests, the Spanish allowed the lower echelons of indigenous administration to remain in place with conquistadors controlling the regions from the top. As Prem notes, the spoils of war, combined with the fruits of indigenous labor, initially provided the Spanish with incredible wealth. But after the Crown and its agents took their share, there was little left over for the conquistadors and their subordinates. The solution to this problem was the *encomienda*, whereby conquistadors divided up the “tribute and service required of the indigenous population,” mainly in the form of agriculture and some labor. While the Crown had some reservations, it allowed the *encomienda* system to flourish while also placing limits on the power of the conquistadors. In particular, the Crown wanted the

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<sup>165</sup>Patricia Seed, “Failing to Marvel: Atahualpa’s Encounter with the Word,” *Latin American Research Review* 36 (1991): 8-9.

*encomenderos* to treat their indigenous subjects humanely and “to provide for the religious education” of indigenous people.<sup>166</sup>

The New Laws of 1542 placed restrictions on where *encomenderos* could live and limited their agricultural activities. The laws forbade *encomenderos* from “owning grazing land within their *encomienda* territory” and curbed their rights to raise pigs. The Crown feared the rise of an entrenched colonial elite and sought to curtail the agricultural rights of *encomenderos* to keep them in check. Despite these limitations and some early successes in mining, agriculture was still the most important economic function of *encomiendas* in this early period. The *encomenderos* gained large tracts of land, in the form of royal grants (*reales mercedes*) and municipal grants. But as disease took a toll on indigenous populations, as more Spanish settlers arrived, and as the first generation of conquistadors passed, the *encomienda* system proved inadequate. There were simply too many settlers and not enough land and tribute to go around.

One alternative to the *encomienda* was the city of Puebla de los Angeles, an agricultural utopia that was meant to serve as a model for other villages in New Spain. Puebla de los Angeles would not have much indigenous labor, but would instead rely on Spanish hard work. This idea dovetailed nicely with the utopian ideals of the Franciscans and the Crown’s desire “to encourage the emigration of farmers to the New World.” But this settlement strategy failed rather quickly, due to a combination of factors. Neighboring *encomenderos*, along with elites who sought to consolidate and form their own large estates, gobbled up Puebla de los Angeles’ fertile land in the Valley of Atlixco.<sup>167</sup> Simply put, the Puebla de los Angeles model of agricultural development could not compete with the *encomienda* system, especially when Cortés himself fashioned himself as the chief *encomendero* of New Spain.

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<sup>166</sup>Hanns J. Prem, “Spanish Colonization and Indian Property in Central Mexico, 1521-1620,” *Annals of the Association of American Geographers* 82, no. 3 (1992): 445.

<sup>167</sup>Prem, 446-7.

Within Cortés' own holdings in Cuernavaca, he immediately had wheat planted and ordered the construction of a sugar plantation. He also sought to expand stockraising, particularly sheep. All of this came, in part, as a result of Spanish demand for familiar pieces of their own diet; "wheat, bread, veal, and pork" were preferable to indigenous products like maize and turkey. Charles V desired that farming be a top priority for Spaniards in the New World and Cortés' efforts, along with those of the other *encomenderos*, meshed well with that goal. The early years of Spanish consolidation established several important precedents in terms of land ownership and agricultural production. First, land grants were awarded mostly along class lines, particularly to "prominent citizens" and to the military for services rendered. And as Prem argues, the Spanish dependence on indigenous labor meant that capital was often required to get a farming enterprise off the ground. Thus, common immigrants had difficulty in finding productive land of their own, as the experience of Pueblas de los Angeles suggested. But indigenous peoples suffered the most agriculturally, as their lands were increasingly assimilated into Spanish estates. In addition, the arrival of roaming Spanish livestock spelled doom for indigenous maize fields.<sup>168</sup>

One way to contextualize Spanish agriculture and settlement in the New World is to discuss it in terms of modes of production. Andre Gunder Frank argues that colonial Mexico was a cog in the wider enterprise of mercantile capitalism. With the extraction of precious metals being the primary economic goal, he argues, agriculture was a means to an end, a way to fuel labor: "the production of precious metals required food, shelter, and clothing for the workers and the colonists, as well as tools and materials for the extraction and the transport of the metals."

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<sup>168</sup>Prem, 447-8. While Cortés and the *encomenderos* operated with great success in the colonial period, it is important to note that some indigenous communities retained their lands with varying degrees of success. Wayne Osborn offers an example with the indigenous community of Metztlán. See Osborn, "Indian Land Retention in Colonial Metztlán," *Hispanic American Historical Review* 53, no. 2 (May, 1973), 217-238.

The Spanish would build upon indigenous institutions and “graft their own economy” onto the existing one.<sup>169</sup> From this perspective, agriculture has some minor importance, especially in regards to joining indigenous agriculture to the wider Spanish economy. The failed effort to maintain separate Spanish and indigenous communities and economies—an attempt on the part of the Crown to allow indigenous peoples to have limited socio-political autonomy—came about as a result of the economic pressures brought on by mercantile capitalism. He even paints the most important socioeconomic process of the time—the acquisition of indigenous land and its redistribution in grants and *encomiendas*—in terms of indigenous labor and not in agricultural yields: “the real interest of the Spaniards...was in Indian labor for use in the establishment and operation of Spanish enterprise.” With so few Spanish settlers on the ground, arable land was not yet in high demand, making the desire to import Spanish agriculture an afterthought in the early decades of the conquest for colonial governors and conquistadors.<sup>170</sup>

While there can be no doubt that mercantile capitalism was the dominant economic system in the sixteenth-century Spanish empire, it is an overstatement to place agriculture so low on the economic totem pole. The ideal of the farmer, as demonstrated by Prem, was a powerful force in the imaginations of early modern Spaniards of all ranks, from Charles V and Cortés, down to immigrant farmers. The extraction of precious metals was important in an economic sense, but that enterprise carried none of the cultural currency that agriculture did.

As had always been the case since the Spanish arrival in Mexico, Cortés both demonstrated and helped to establish Spanish attitudes toward agriculture and settlement in the New World. He wore several different, symbolic hats in New Spain. As Hugh Thomas argues, Cortés’ first and most important role in New Spain was to be “the despot of the new territory he

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<sup>169</sup> Andre Gunder Frank, *Mexican Agriculture, 1521-1630: Transformation of the Mode of Production* (Cambridge: Cambridge University Press, 1979), 1-4.

<sup>170</sup> Frank, 6-7.

had conquered.” While Cortés had an acrimonious relationship with his immediate colonial superiors, Cortés sought to conquer new lands in his own right and curry favor with the Crown.<sup>171</sup> Nevertheless, the exact boundaries and nature of Cortés’ new-found rule were unclear, due in large part to the fact that “no one knew where Cortés’ dominions began and ended.” Cortés had established Veracruz during the beginning of the Mexican conquest and that was how he gained the political capital to go ahead with the conquest. But if Cortés was to consolidate his newly-acquired power, he needed to establish a seat of power and demonstrate to the Crown that his realm was economically productive and that it represented the best of Spanish culture. With these goals in mind, Cortés set about the task of rebuilding the Aztec capital of Tenochtitlan so that it could serve as the nexus of Spanish power in the region. He brought in Alonso García Bravo, the chief architect of the fortifications at Veracruz, to assist with the rebuilding efforts.<sup>172</sup> The presence of Bravo, along with the political purposes each city served, connected the two cities, with Cortés standing in the middle of it all.

By 1523, great strides had been made in the rebuilding of Tenochtitlan. As Thomas notes, Cortés wanted the city to be “grand and imposing” and also wanted it to reflect its pre-conquest grandeur. The conquistadors admired the city for its great beauty and gigantic size; it was a capital that “Spain itself did not have.”<sup>173</sup> The building of new cities, and the rehabilitation of old ones, was a crucial part of Spanish colonialism in that it was inextricably linked with *encomiendas* and, thus, the entire economic structure of the early Spanish colonies. Just as the “gibbet and pillory [were] reminders of civilization,” the *encomienda* would reward those

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<sup>171</sup>Hugh Thomas, *The Golden Empire: Spain, Charles V, and the Creation of America* (New York: Random House, 2010), 4.

<sup>172</sup>Thomas, 7-9.

<sup>173</sup>Thomas, 11.



Spanish who had spilt blood in the service of the king.<sup>174</sup> Municipalities, founded by conquistadors and granted political legitimacy by the Crown, played a key role in the distribution of land. Thus, municipalities maintained the same character and responsibilities they had during the Iberian Reconquista.

*The Early Weeks of Cortés' Mexican Expedition*

Inga Clendinnen discusses the accounts surrounding the Spanish conquest of Mexico, including Cortés' own version of events. She argues that, starting with Cortés, later readers of the conquest narrative bought into the story of a complete and easy victory by the Spanish in Mexico. The ancestors of the modern discipline of history, which views itself as being shielded by institutional standards of objectivity, were men like Juan Ginés Sepúlveda and Cortés. Clendinnen posits that the dominant portrayal of the conquest stems from the "insidious human desire to craft a dramatically satisfying and coherent story out of fragmentary and ambiguous experience."<sup>175</sup> Calling historians the "camp followers of the imperialists," Clendinnen seeks to tell the story in a new light, probing the psychology of both Cortés and the Tenochtitlan defenders. She allows that Cortés was "incomparable" in terms of combat prowess and diplomatic acumen, but qualifies that statement by pointing to Cortés' recklessness in pushing the Catholic faith.<sup>176</sup> In terms of strategy, Clendinnen juxtaposes European and Mexican styles of warfare, once again calling into question the reigning narrative of Spanish bravery in the face of overwhelming numbers. By besieging Tenochtitlan and refusing a direct engagement with the natives, the Spanish showed cowardice and revealed their own precarious, weak position at the

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<sup>174</sup>Thomas, 12-3.

<sup>175</sup>Inga Clendinnen, "Fierce and Unnatural Cruelty: Cortes and the Conquest of Mexico," *Representations* 33 (Winter 1991): 67.

<sup>176</sup>*Ibid.*, 71, 72-3.

time. Far from being a “providential” conquest, Cortés’ campaign constantly stood on the brink of collapse. She recognizes that the “attitudes of losers have little historical resonance,” but also cautions that the Spaniard “villains” should not be painted with too broad a brush. By probing the psychology of Cortés during the siege, she highlights his desire to spare Tenochtitlan physically and his despair in the face of obstinate Aztec defenders.<sup>177</sup> Many older portrayals of the conquest have treated the Spanish as invincible and the natives as “others” who succumbed in the face of superior military tactics and technology.<sup>178</sup> Thus, Clendinnen demonstrates the links between the dissemination of particular forms of historical memory and the exercise of cultural hegemony. Clendinnen’s narrative mirrors this dissertation’s own goal of working one’s way into the mindset of the conqueror and discovering the internal logic with which they ordered the world.

The following section draws heavily from Cortés’ *Letters from Mexico*, giving some insights into the language he and his followers used, as well as the sorts of things the expedition prioritized in terms of reporting to Charles V. These letters had another purpose beyond documenting the activities of conquistadors: they were advertisements, almost the early modern equivalent of travel guides. In order to find funding for New World excursions, aspiring conquistadors had to sell a vision of economic viability. This often led to exaggerated claims of regions “overflowing with precious metals and compliant native peoples.”<sup>179</sup> Just as earlier generations of conquistadors had parceled out conquered Moorish lands on the Iberian Peninsula, the American conquistadors made their case for why indigenous lands deserved a similar treatment.

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<sup>177</sup>Ibid., 82-3 and 89-91.

<sup>178</sup>Ibid., 94.

<sup>179</sup>*Seven Myths*, 66.

Of particular interest is Cortés' exploration of the Gribalja River in the Yucatan Peninsula. Cortés' chronicler and loyal follower, Francisco López de Gómara, consistently highlighted Cortés' noble motives and how this expedition would benefit the Crown. "On no account would he leave until he learned the secrets of the land," said the author, until Cortés "might send your Majesties a true account of it."<sup>180</sup> He recorded that the land was "very fertile and abound[ed] in maize, fruit and fish."<sup>181</sup> When explaining the origins of the expedition, the author claims that it was "we in this fleet who were of noble lineage, gentlemen and knights" that urged Cortés to extend Spanish dominion over the land and to "increase its revenues" for the Crown. The land was described as "very good and most wealthy," and the Spaniards could move forward in settling the region because "the Chieftain and his Indians had shown...goodwill" to the Spaniards.<sup>182</sup> The picture the chronicler described fell very much into how New World chroniclers and conquistadors wanted to portray the New World: rich in natural resources and beauty, with indigenous peoples ready to accept civilization. And in an attempt to downplay the image of Cortés as an impetuous, insubordinate conquistador, the author contends that it was a group decision that forced Cortés to begin settling the region. Description was, thus, often a political act.

The author plainly spells out the exact purpose of establishing a municipality with a town council: "it seemed to all of us better that a town with a court of justice be founded and inhabited in Your Royal Highness' name so that in this land also you might have sovereignty." The chronicler puts the interests of the Crown first before the interests of other parties. He then asks that "once the land has been settled by Spaniards" that the Crown may be "so gracious as to grant favors to us and to the settlers who come in the future." The system of municipalities was

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<sup>180</sup>Ibid., 18-9.

<sup>181</sup>Ibid., 23.

<sup>182</sup>Ibid., 24.

closely tied in with notions of patronage, a guiding characteristic of Spanish Habsburg governance. Finally, the author alludes to the conflict between Cortés and the governor of Cuba, claiming that the governor had “requested him to cease trading in the manner he was doing” because it would “to a large extent destroy the land.”<sup>183</sup> This last statement was crucial because it discredited the governor’s authority not only on political grounds—the existence of an autonomous city with its own council—but also on the grounds that the governor was a poor manager of the region’s resources. In addition, it implies that the municipality is the best institution for ordering the region’s resources and peoples.

In keeping with the idea of presenting a desirable picture to the Crown, the chronicler refers often to Spain, creating environmental homologues and comparisons. In one passage, the author begins by saying that “the country inland is likewise very flat with most beautiful meadows and streams.” But then he switches to a more hyperbolic description, claiming that “among these are some so beautiful that in all Spain there can be none better” and that the land was both “pleasing to the eye and rich in crops.” While the landscape seemed rife with unrivaled natural beauty, the author also leans on the familiar to draw in the reader, claiming that “in the kinds of birds and animals there is no difference between this land and Spain.” But he also notes the exotic, pointing out that “there are lions and tigers as well.” In the earlier decades of the Spanish expeditions in the New World, the purpose of chronicling was primarily to sell the Crown on funding more expeditions. In the age of Philip II and with the maturation of the Spanish colonies, observation became more orderly and bureaucratic, reflecting the needs of a consolidating empire more than the entrepreneurial dreams of ambitious conquistadors.

As Cortés wandered through the Mexican countryside, he was searching for signs of civilization in addition to fertile or mineral-rich landscapes. Starting in the provinces of Cempoal

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<sup>183</sup>Ibid., 26.

and Sienchimalem, he noted a “town which is very strong and built in a defensible position on the side of a very steep mountain.” He and his companions went over a pass which they then called “Nombre de Dios” and then from there he “continued for three days through desert country which is uninhabitable because of its infertility and because of the extreme cold.”<sup>184</sup> Cortés was always careful to note the climatological features of an environment, though his observations on temperature often swung wildly between very cold or very hot.

In an unnamed territory later on, Cortés was much more impressed with what he found, though he was more concerned with describing the man-made than the natural: “On a very high hill is this chief’s house with a better fortress than any to be found in Spain and fortified with better walls and barbicans and earthworks.”<sup>185</sup> As was often the case in his letters, Cortés often compared the villages and cities he was finding with architecture, food, and culture in Spain and North Africa. For Cortés, describing indigenous villages was as important, if not more so, than finding farmlands. Organized village life was a signifier of civilization and, once conquered, the Spanish municipal apparatus could be placed on top of or alongside the indigenous leadership as a way to take possession of an area. While exploring Tescalteca weeks later, he finally had more success in finding signs of civilization. When coming upon an unnamed city in Tescalteca, Cortés exclaimed that “the city is so big and so remarkable...for the city is much larger than Granada and very much stronger.” The fact that Cortés chose Granada as a point of reference is important for several reasons. First, it gave readers back in Spain a familiar point of reference, both temporally and geographically. Also, it gave the Crown an idea as to how powerful the region’s natives were in terms of raw military manpower. Finally, it indicates the high esteem which Cortés, and by implication the Spaniards at large, held North African and Moorish

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<sup>184</sup>Ibid., 54-5.

<sup>185</sup>Ibid., 57.

civilization. In addition to noting the scale of the city, Cortés was equally impressed with the infrastructure of the city. According to Cortés, the city had “as many good buildings and many more people than Granada had when it was taken” and its agro-economic infrastructure was better because the city was “very much better supplied with the produce of the land, namely bread, fowl, and game, and fresh-water fish.”<sup>186</sup>

Cortés was interested in finding the attributes which he believed made up a proper city. Fortifications and population were key features, but equally important was the city’s everyday economic activity. “There is in this city,” Cortés continues, “a market where each and every day upward of thirty-thousand people come to buy and sell...there is much pottery of many sorts and as good as the best in Spain.” He also notes the presence of barbers and the city’s many baths. Beyond the material features of the city, Cortés also believed that its social order was equally impressive. He proclaims that “there is amongst them every consequence of good order and courtesy” and that they were “such an orderly and intelligent people that the best in Africa cannot equal them.” In addition to being culturally and economically viable, Cortés hoped the city’s inhabitants would be good subjects.

The closest European analog Cortés can imagine for this city was the Italian city-states. In this province, according to Cortés, there were “many beautiful valleys and plains, all cultivated and harvested, leaving no place untilled.” Far from describing a fertile land bereft of management, Cortés often extolled indigenous land management. The city’s uncanny resemblance to an Italian city-state fascinated Cortés to no end: “And the orderly manner in which, until now, these people have been governed is almost like that of the states of Venice or Genoa or Pisa, for they have no overlord.” But while this city and its dominions resembled Venice or Pisa, Cortés also likens them to a feudal state, saying that there were “many chiefs, all

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<sup>186</sup>Ibid., 67.

of whom reside in this city, and the country towns contain peasants who are vassals of these lords and each of whom hold lands independently.”<sup>187</sup> This made sense within the early modern context in Europe, since different European states were experimenting with forms of governance. Cortés had a multitude of European state forms to choose from for the sake of comparison.

Cortés devoted lengthy portions of his efforts in Mexico to creating alliances and fermenting rebellion against Montezuma among his lesser vassals and the independent city-states nearby. While the specifics of those dealings are not the focus of this chapter, Cortés’ report on his diplomacy reveal the same preoccupations with order and wealth that take up so much space in other parts of his letters. On settling the enmity between the provinces of Churultecal and Tascalteca, Cortés noted that “...there the city and the land were so pacified and full of people” after his actions.<sup>188</sup>

As Cortés explored Mexico, many cities caught his eye, but the city of Churultecal was of particular beauty for him. While negotiating between the enemy city-states of Churultecal and Tascalteca, he had learned about each city’s customs from a material perspective. The people of Churulteca wore “somewhat more clothes than those of Tascalteca” and the elite of the city wore “burnooses over their garments, but they are different than those worn in Africa because they have arm holes.” In addition to a rich culture, the city was also successful in Cortés’ eyes because it was in a fertile agricultural region and had been properly managed by the natives: “this state is very rich in crops, for it possesses much land, most of it irrigated. The city itself is more beautiful to look at than any in Spain.” What is most interesting in this passage is the way in which Cortés often made no distinction between the admirable qualities of the countryside and the greatness of the city it surrounded. Churultecal was culturally diverse and rich in a way that

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<sup>187</sup>Ibid., 68.

<sup>188</sup>Ibid., 74.

Europeans could recognize—its clothing was similar to that worn by Africans—and its agricultural foundations were quite strong because of adequate irrigation and fertility. Thus, when Cortés proclaims that the city was “more beautiful to look at than any in Spain,” the statement is also a quality judgment on the whole about the province’s level of civilization.

To drive that point home to the reader, Cortés continued, saying that “from here to the coast I have seen no city so fit for Spaniards to live in.” Why was this case for him? Cortés once again answered that question in terms of potential agricultural productivity, arguing that the city had “had water and some common lands suitable for raising cattle.” Furthermore, he claimed that there were “so many people living in these parts that not one foot of land is uncultivated.” Cortés made a correlation between the population of a province and its agricultural potential and this raises several interesting points. Cortés often used “fertile” or “fertility” when introducing a region to the reader, saying that region X was fertile in cacao or freshwater fish, for example. Just as often, Cortés would make a point of describing the immense numbers of people in a city, sometimes claiming that a city or region’s population was innumerable. In order for a region to be successful in Cortés’ eyes, it needed to be fertile both agriculturally and population-wise, since there was no way the region could produce without enough people to perform the labor.

Despite being economically successful, Cortés noted that the region still had rampant poverty. He noted that “in many places they suffer hardships for lack of bread.” And in the city, there were people who begged from “the rich in the streets as the poor do in Spain and in other civilized places.”<sup>189</sup> Poverty, in itself, did not mark a city as unsuccessful in Cortés’ judgment; rather it meant that the city was “civilized” and economically viable.

As Cortés inched closer to his fateful encounter with Montezuma, he repeatedly expressed his own amazement with Mexico’s geographic diversity. While his expedition was

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<sup>189</sup>Ibid., 74-5.



some “eight leagues from this city of Churultecal,” Cortés noticed “two very high and remarkable mountains.” On one of the mountains, he observed a recurrent “cloud of smoke as big as a house.” Taken aback by the astonishing sight, he “wished to know the explanation of this which seemed to be something of a miracle.” He sent a group of Spaniards to explore the mountains and report back to him. When they returned, he said that “...they came very close to the summit, so much so that while they were there the smoke started to come out.” They reported massive ice deposits, And he was particularly amazed by the ice found there: “for this seemed to be something very rare in these parts...because of the warm climate, especially as this land is at twenty degrees, which is on the same parallel as Hispaniola, which is always very hot.”<sup>190</sup> Cortés’ scouts had likely found the volcano Popocatepetl, located roughly 70 kilometers southeast of modern-day Mexico City.<sup>191</sup> Despite the preoccupation with describing agricultural productivity and cities, Cortés still recognized the region’s inherent natural beauty.

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<sup>190</sup>Ibid, 77-8.

<sup>191</sup>Volcano Discovery, <http://www.volcanodiscovery.com/popocatepetl.html>.

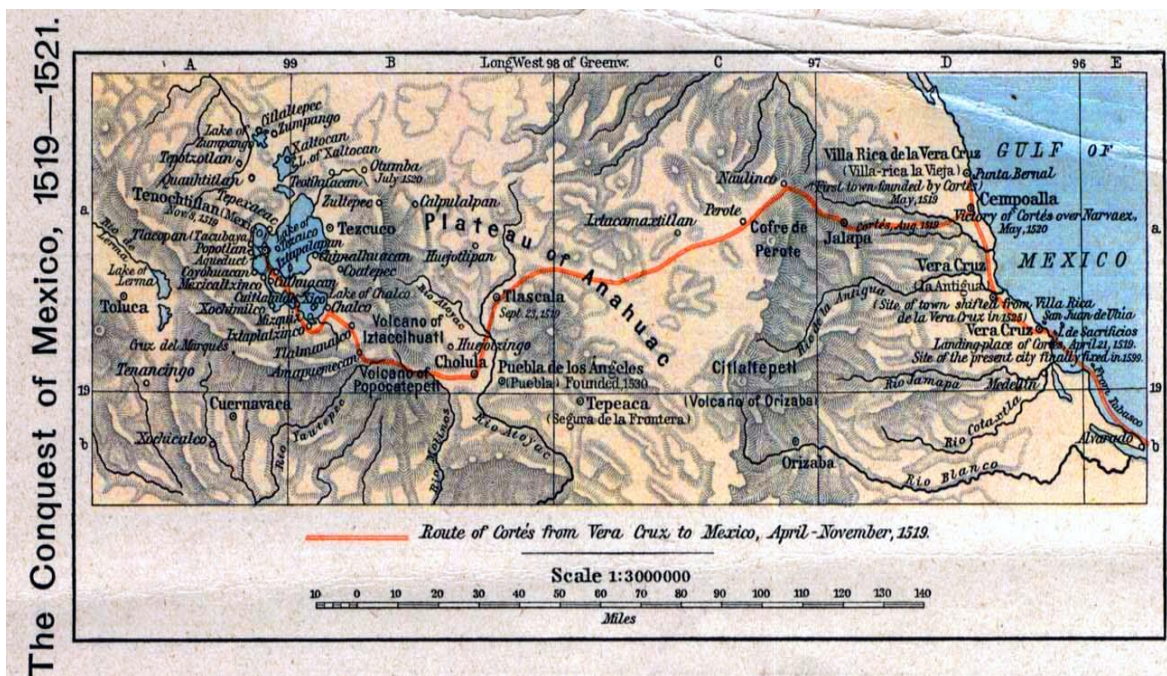


Figure 6: Cortés' expedition started in Veracruz in April, 1519.<sup>192</sup>

On his approach to Tenochtitlan, Cortés came across a multitude of satellite cities and villages on the lake. In the city of Yztapalapa, he claimed that it had “twelve or fifteen thousand inhabitants” with the city being “built by the side of a great salt lake, half of it on the water and the other half in dry land.” As was the case in previous cities, he took note of the city’s level of infrastructure and the local culture: “the chief of this city has some new houses which, although as yet unfinished, are as good as the best of Spain; that is, in respect of size and workmanship.” He also notes the “beautiful gardens with every manner of fish and bird.”<sup>193</sup>

After Cortés arrives in Tenochtitlan and takes Montezuma prisoner, he continues his reconnaissance of the area, though he no longer takes an active part in the explorations. He immediately began searching for the region’s gold deposits, as well as new ports and larger rivers so that he could get easier access to the sea. In Culua province, his representatives “were

<sup>192</sup>Emerson Kent, [http://www.emersonkent.com/map\\_archive/mexico\\_1519.htm](http://www.emersonkent.com/map_archive/mexico_1519.htm).

<sup>193</sup>Ibid., 82-3.

shown seven or eight rivers from which they were told gold was taken.” The same was said of the province of Tuchtebeque.<sup>194</sup> In addition to searching for gold, Cortés continued his efforts to document all of central Mexico’s arable and non-arable lands. “According to the Spaniards who were there,” Cortés reported, “the province of Malinaltebeque was very well-provided for setting up farms.” He delegated this task to the captive Montezuma, commanding him to build farms in the area. Montezuma, at Cortés’ request, sent orders and was highly successful and productive in the time he was still alive.<sup>195</sup>

Gaining knowledge was as crucial to the Spanish conquest of Mexico as were any of the violent means of doing so. The non-violent ways in which the Spanish instituted hegemony also fill the pages of Susan Kellogg’s work. In her definition of hegemony, she stresses the more “consensual or voluntary forms of control” where the powerful make their practices appear “normal and natural.” In this way, she claims that the Spanish colonial system was “totalizing” and left “virtually no aspect of Indian society untouched.” The emphasis of her study is on colonial religion and law. Kellogg’s argues that Catholic priests learned indigenous languages in order to pass on Catholic teachings. This point mirrors Seed’s thesis about the use of language and writing to impose hegemony, though Kellogg’s argument has an added wrinkle: indigenous language, like Spanish language, could be used as a tool of the powerful.<sup>196</sup>

Cortés uses Montezuma not just for Montezuma’s authority, but also for his knowledge, and this was crucial, albeit brief, moment where Montezuma exercised agency and made the best of his new position. After establishing new farms in Malinaltebeque, Cortés has Montezuma “make a map of all the coast” for him. Using the map Montezuma provided, Cortés found a

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<sup>194</sup>Ibid., 93.

<sup>195</sup>Ibid., 94.

<sup>196</sup>Susan Kellogg, “Hegemony Out of Conquest: The First Two Centuries of Spanish Rule in Central Mexico,” *Radical History Review* 53 (1992): 29 and 30.

suitable port in the province of Tlaxintecla, a land also valuable because it was “very flat and fertile, and abounds in all manner of crops, and the population is almost without number.”<sup>197</sup>

### Conclusion

In summary, several themes stand out in Cortés’ reports to the Crown. First, in describing the overall quality of a province, there was a very thin line between the quality of a city and the quality of its agriculture. This is not necessarily a discovery in itself, but it is interesting that Cortés imagined that relationship existing at all. As his comparison of the unnamed city and the Italian city-states shows, Cortés believed that a city and its surrounding countryside existed together as a unit in terms of agricultural production, economic viability, and good governance. Columbus, Cortés, and every conquistador followed the early modern Spanish strategy centered around constructing cities in order to provide a base of operations and to legitimize the conquest.<sup>198</sup> A city’s ability to mobilize labor depended on having a large enough population, which was then reflected in the extent of a city’s infrastructure and the complexity of its defenses. City and country were a complex, interconnected unit in both natural and legalistic terms. As the sixteenth century approached its midpoint, the Crown sought to tighten its control over its colonies. Starting in the 1550s, a series of economic crises would make this task all the more crucial.

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<sup>197</sup>Ibid., 94-5.

<sup>198</sup>Martínez, 67 and 71.

## CHAPTER FOUR

**Reforming the Colonies: The Conservation of Peoples and the Measuring of an Empire's Wealth***Introduction*

Military conquest and the establishment of cities and viceroyalties marked the beginning of Spain's imperial activities in Americas, but these would not suffice if Spain wanted to consolidate its control of its American territories. During the mid-sixteenth century, the Spanish Empire was confronted with problems that were simultaneously economic, political, and cosmological. The geographic and demographic extent of Spain's new American holdings was incomprehensible to the Crown. The Spanish Crown had laid a legal claim to these lands and the conquistadors were founding new municipalities and viceroyalties to make these claims concrete, but knowledge would be needed to govern the colonies efficiently. Starting with Fernández de Oviedo's *The General and Natural History of the Indies* in the 1520s and 1530s, numerous court historians and clergymen in the New World attempted to reckon the flora, fauna, peoples, geography, and natural resources of the Americas. As Worster argues, the Europeans of the sixteenth century had a "greater capacity to imagine wealth on a global scale and to gather facts, make maps, and calculate profits."<sup>199</sup>

Oviedo's work defined the central problems of describing the Americas: making the massive diversity of peoples, flora, and fauna comprehensible to the Crown, and rendering a "true account" of everything there was to see. Oviedo's writing, like that of the conquistadors, was fueled by advocacy for the founding of new towns and for the funding of new campaigns

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<sup>199</sup>Worster, *Shrinking the Earth*, 20.

and exploration.<sup>200</sup> Thus, the fantastical and the exotic dominated his writing; the New World was a great mystery, and it was his job as cosmography to somehow work the Americas into the narrative of Creation. But as the century progressed, the nature of these geographical texts evolved to reflect changing economic and political realities in the empire. As part of reforming the Council of the Indies and the colonial administration, Juan López de Velasco wrote a treatise of his own, *The Universal Geography and Description of the Indies*, and spearheaded a massive fact-finding mission in the form of the *Relaciones Geográficas*. Compared to Oviedo's work, Velasco's efforts were more bureaucratic and precise in nature. Where Oviedo emphasized the natural beauty and wonders of the Americas, Velasco's *Description of the Indies* and the *Relaciones* portrayed a landscape that was quantifiable and knowable, its natural resources and peoples measurable. Velasco believed the Council of the Indies was distracted by business interests and legal matters. He also contended that, to be the best administrators, Council members should have lived in the Indies at some point. Velasco eventually chafed under the secretive restrictions placed upon his craft, making forays into other projects in an attempt to gain wider recognition. Nevertheless, he was a supremely efficient writer and administrator.<sup>201</sup>

Throughout the sixteenth century, Spanish geographic texts evolved to meet the needs of an evolving empire. From a political perspective, the Crown sought to have a firmer hand in colonial affairs. The first generation of conquistadors and colonial governors had laid the foundation of good colonial government in the form of municipalities, but colonial government during the early sixteenth century was inefficient and unorganized. Stafford Poole describes the changing relationship between the Spanish Crown and its colonies in the mid-sixteenth century

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<sup>200</sup>Kathleen Ann Myers, *Fernández De Oviedo's Chronicle of America: A New History for a New World* (Austin: University of Texas Press, 2007), 15.

<sup>201</sup>Portuondo, 143.

as a transition from “royal permission” to “royal intrusion.”<sup>202</sup> While the first two chapters of this dissertation focused on municipal or micro-level environmental language in Iberia and the Americas, this chapter examines the Crown’s activities in the Americas on a macro scale. In the Iberian municipalities, Spaniards had to grapple with resource scarcity; conservation legislation and an emphasis on the health of the community emerged as a solution. The founders of New World cities, on the other hand, contended with what they saw as limitless resources and land. The Spanish Crown learned from both experiences—perceived scarcity and abundance—and began to integrate both worldviews into a cohesive whole. The New World did in fact contain enough agricultural and potential monetary wealth to enrich all of Spain’s citizens, but that wealth had been mishandled and abused by the early conquistadors and the colonial elite that came after them. Thus, the Crown sought to increase its own awareness about its holdings and to correct the misuse of the wealth of the Americas. The Crown did not measure “wealth” solely in terms of gold and silver, but in a more abstract sense. The peoples of the Americas were a form of wealth themselves, not just in terms of labor, but also in terms of redeemable souls. This chapter argues that Spain’s colonial reforms articulated a synthesis of Spain’s Old World environmental lessons—that resources are scarce and need to be managed by appropriate authorities—with the social and administrative realities of the New World where the Crown believed abundance could reign if the colonial authorities were brought into line.

The movement toward the consolidation of the Americas had two distinct facets, one facet being legal and the other being the acquisition of a variety of demographic and geographic knowledge. Starting in the 1540s, the Spanish Crown began a series of efforts to bring its

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<sup>202</sup>Stafford Poole, *Juan de Ovando: Governing the Spanish Empire in the Reign of Philip II* (Norman: University of Oklahoma Press, 2004), 4-5 and 109-110; and Fred W. Spain, and Henry Stevens Lucas, *The New Laws of the Indies for the Good Treatment and Preservation of the Indians, Promulgated by the Emperor Charles the Fifth, 1542-1543*. New York: AMS Press, 1971.

colonial authorities under control and to streamline administration. Charles V's New Laws of 1542 suspended *encomiendas* in New Spain, but this proved to be a short-lived experiment as localized revolts broke out among the Spanish colonial elite.<sup>203</sup> As early as 1512's Laws of Burgos, the Spanish Crown sought to offer at least rudimentary protection to American indigenous peoples. The language of both documents reveals a familiar early modern Spanish concern: conservation or, in this case, the conservation of indigenous peoples and their salvageable souls. Thus, Spanish imperialism in its origins treated peoples as a resource that needed management. This in itself is not a new concept, as every historical civilization was built on the backs of its people in some fashion. But what makes the Spanish Crown's efforts so unique is how these efforts at conservation fused so neatly with what Spain's chronicler-historians were doing at home and abroad throughout the sixteenth century.

If one facet of Spain's imperial consolidation was legal, the other was based around a massive body of literature on New World geography, demographics, and history. When Philip II assumed the Spanish throne in 1556, his interest in seeing to state matters personally—a hands-on approach in the extreme—came to characterize his reign. As Henry Kamen argues, the king's desire to oversee all the minutia of governing the empire condemned him to “spend[ing] his days sorting out the workings of his vast web of a monarchy.”<sup>204</sup> Philip confronted the problem of consolidating Spanish rule in the newly acquired American lands with the same bureaucratic mindset that had always served him so well. Starting in the 1570s, Philip II commissioned several projects whose goals were to explore the empire's Iberian and New World territories, to report on these lands' topography and major resources, and to provide a brief history of the lands' peoples. Geohistorical projects had been going on throughout the sixteenth century. As

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<sup>203</sup>Poole, 109-110.

<sup>204</sup>Henry Kamen, *Philip of Spain* (New Haven: Yale University Press, 1997), 321.



early as the 1520s, Fernández de Oviedo y Valdés wrote the *Historia general y natural de las Indias*, the first of many geohistorical texts on the Americas. Now in the 1570s, geohistory and administrative reform would coalesce.

At the center of this project was Juan de Ovando, president of the Council of the Indies and Juan López de Velasco, the chief cosmographer and historian-chronicler of the empire. In 1574, working in conjunction with the Crown and the Council of the Indies, Velasco completed the *Geografía y Descripción de las Indias*, an ambitious treatise that described the geography, natural resources, plant and animal life, and peoples of the New World. But this project paled in comparison to the *Relaciones Geográficas*. The crown distributed these *Relaciones*—answers to a series of questionnaires issued by the Council of the Indies—on both sides of the Atlantic starting in the 1570s, allowing representatives from the various villages to report on the state of their particular village. The information in the *Relaciones* was remarkably similar to that found in Velasco’s *Descripción Universal de las Indias*, except the *Relaciones* were more comprehensive and extensive. Whereas the *Descripción Universal de las Indias* focused heavily upon geographic description and cosmography, the *Relaciones* featured a more in-depth treatment of New World history, going city-by-city and province-by-province in the pursuit of regional histories. The formulation of the *Descripción Universal de las Indias* and the *Relaciones* were both commissioned and supervised by Ovando and Velasco.<sup>205</sup>

The story of how a court historian found himself in such a powerful position is part of a wider story of Spanish imperialism. The importance of Spanish intellectuals’ efforts to catalogue and describe the New World lies in the language they used, and how that language revealed certain beliefs that early modern Spaniards held about the natural world. As early as Hernán

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<sup>205</sup>Barbara E. Mundy, *The Mapping of New Spain: Indigenous Cartography and the Maps of the Relaciones Geográficas* (Chicago: University of Chicago Press, 1996), 29.

Cortés' expeditions in Mexico in 1518-1520, Spaniards were interested in geographical and anthropological knowledge. What began as military reconnaissance in the time of Cortés eventually evolved into bureaucratic information-gathering by the 1560s. By the latter half of the sixteenth century, Philip II recognized the need to reform the administration of the New World. Ovando and Velasco, at the behest of the king, spearheaded this reform effort. Like Philip II, they brought their passion for knowledge and textual representation to bear upon the problem. The office of cosmographer-chronicler was perfect for the task. Velasco constructed histories of the region, drawing connections between Old and New World histories. In addition, the works' structures were such that Crown and Council could visualize the exotic locales of the New World. The New World environment was a key player in both texts, its description taking up vast portions of text throughout the *Descripción Universal de las Indias* and the *Relaciones*. Thus, historical construction and the description of physical space were linked intimately in Ovando and Velasco's projects. But their efforts hardly emerged from a historical vacuum.

### *Texts and New World Imaginaries*

Anthony Pagden theorizes that how Europeans described and classified Amerindians had little to do with what they actually observed in the Americas. Instead, he proposed that European thought about Amerindians was rooted in Aristotelian and Thomist epistemologies from the Old World. He charts the evolution of ethnographic thought from the sixteenth to the eighteenth centuries.<sup>206</sup> At the heart of early modern European inquiry about the New World, according to Pagden, was the “greatest ethnographical conundrum of all: what is the cause of the huge variation in the modes of human social organization.” Most intriguing among his claims was that

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<sup>206</sup>Anthony Pagden, *The Fall of Natural Man: The American Indian and the Origins of Comparative Ethnology* (Cambridge [Cambridgeshire]: Cambridge University Press, 1982), 1-3.

Europeans did not seek to create an Amerindian “other.” Rather, they hoped to make the exotic intelligible and thereby eliminate the other altogether.<sup>207</sup> Pagden’s work was an excellent launch pad for the historical study of ethnography because it touched on several key aspects of early modern Spanish thought: the obsession with classification, the foundational intellectual traditions from which they drew, and their notions of what constitutes objective reality. Without the formulation of anthropological and racial discourses, hegemony in the Spanish empire would not have had its peculiar shape. This dissertation will continue the course set out by Pagden and others of elucidating the links between early modern race-thinking and environmental thought.

The foundational work on Spanish science and bureaucracy in the colonial period is David Goodman’s *Power and Penury*. At the heart of Goodman’s work is Philip II as a pivotal figure in the history of Spain’s intellectual and governmental thought. He argues that early modern Spain’s scientific endeavors reflected the “centralizing tendencies of the crown,” its need to maintain the empire, and the increasing costs of maintaining a military presence on land and sea.<sup>208</sup> His narrative delved into a variety of topics: medicine, shipbuilding, and mining among them. The activities of experts within these fields illuminated certain aspects of early modern Spanish society, namely that proven expertise sometimes could trump other considerations, such as the desire to eliminate heterodoxy. Goodman recounts the story of Francisco Blanco, a Morisco foreman at the mines in the Andalusian city of Guadalcanal. In what Goodman termed a “striking example of crown compromise,” Blanco continued his work in the mines despite Inquisition orders calling for his exile.<sup>209</sup> The production of silver, an economic imperative, was more important to the empire than ethno-religious considerations in the case of Francisco

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<sup>207</sup>Ibid., 4-5

<sup>208</sup>David C. Goodman, *Power and Penury: Government, Technology, and Science in Philip II's Spain* (Cambridge: Cambridge University Press, 1988), 261.

<sup>209</sup>Ibid., 160 and 262.

Blanco. Expertise, along with compromise, is the major theme of Goodman's work. He posits that compromise on the part of the state meant that Philip II's power was "far from absolute." Thus, Goodman's work demonstrates the role of soldiers, workers, and doctors within the empire while simultaneously highlighting the crown's need to draw knowledge and labor from non-Spaniards and non-Catholics.<sup>210</sup> For Goodman, Spanish hegemony began on the Peninsula itself and, even there, the need to maintain a cadre of experts complicated the process of cultural hegemony.

Antonio Barrera-Osorio and Jorge Cañizares-Esguerra follow in Goodman's footsteps by tying the Spanish empire's scientific endeavors in with the emergence of the imperial bureaucracy. From the perspective of Barrera-Osorio and Cañizares-Esguerra, the machinery of colonial bureaucracy existed not just to administer policy, but also to undergird fact-finding missions. This was a unique relationship between metropole and colony; it bound hegemony with the more esoteric notion of gaining knowledge. Barrera-Osorio argues that the process of observing and describing the New World sparked the empirical impulse that characterized later scientific pursuits by Europeans. Philip II, along with the councils that exercised his will, combined intellectual curiosity with bureaucratic muscle in their pursuit of knowledge about the New World environment and its people. The pursuit of science and power were, thus, linked in this historical context.<sup>211</sup> Cosmographers were, first and foremost, Renaissance humanists who drew from geography, history, cartography and astronomy to make observations about nature. Portuondo, while recognizing the latent anachronism in discussing "science" in the sixteenth

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<sup>210</sup>Ibid., 151 and 264.

<sup>211</sup>Antonio Barrera-Osorio, *Experiencing Nature: The Spanish American Empire and the Early Scientific Revolution* (Austin, TX: University of Texas Press, 2006); Jorge Cañizares-Esguerra, *Nature, Empire, and Nation: Explorations of the History of Science in the Iberian World* (Stanford, Calif: Stanford University Press, 2006).

century, treats these works as coordinated scientific practices.<sup>212</sup>

The Age of Exploration forced early modern Spain to reevaluate its own position in the world and to bring the New World into existing cosmography. For Barbara Mundy, cartography was “the vehicle for envisioning the New World.” When it came to imagining space in the New World, the use of maps and geographical texts was crucial. As Mundy argues, “social organization” could structure “both the understanding and the representation of space.”<sup>213</sup> Philip II could easily visit territories on the Peninsula like Barcelona or Seville; a three-month ocean voyage across the Atlantic to tour Mexico or Hispaniola was out of the question. For a king who believed every decision about the empire should go through him, these texts provided him with the means to extend his will across an ocean. Thus, I assert that the very creation of these texts was in itself an imperial act. Velasco’s work was symbolic of Golden Age Spain’s unique, textual approach to empire. Philip II could never see the New World for himself, nor could he execute the task of administrating the region himself. This gave the *Relaciones* and Velasco’s treatise a special significance: they could act as arbiters between realities on the ground in the Americas and royal policies aimed at governing the region. The images of the New World painted by Velasco and the *Relaciones* could enter into the consciousness of Crown and Council, providing them with the mental imagery to incorporate this region into existing understandings of the world and how it functions. Furthermore, these images could supplement the Crown’s botanical gardens and treasure house. Monarchs of the fifteenth century regarded menageries as “proper appointments of a court.” Louis XIII, for example, kept animals at Versailles. Sixteenth century witnessed a proliferation of botanical gardens in European royal courts.<sup>214</sup> Together, botanical gardens and maps represented the conquest of space, bringing that which is distant

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<sup>212</sup>Portuondo, 1-2.

<sup>213</sup>Ibid., xi and xvi.

<sup>214</sup>Hogden, 117.

closer and demystifying the foreign and exotic.<sup>215</sup>

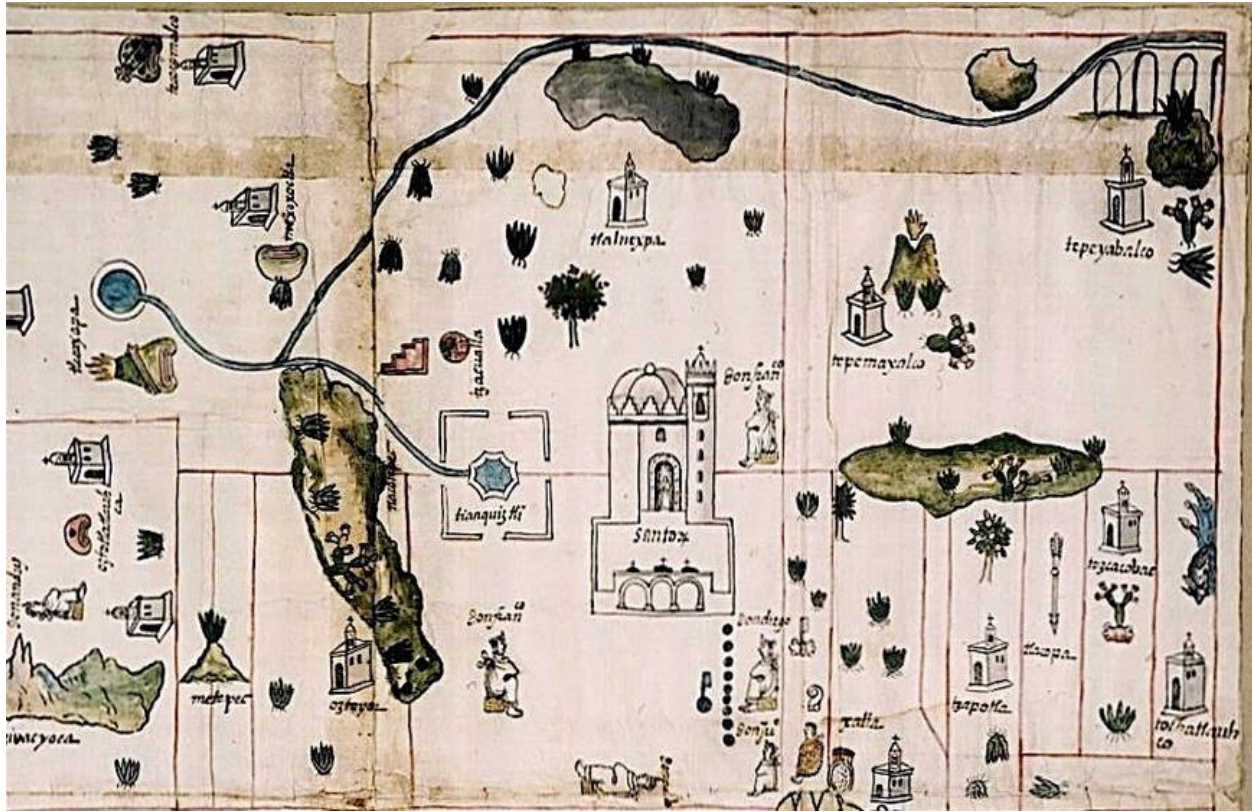


Figure 7: This map depicts Los Arcos de Zempoala, an aqueduct constructed between 1553 and 1570. Its construction is credited to the Franciscan Friar Francisco de Tembleque. The map also depicts the surrounding landscape, including the nearby volcano Tecajete.<sup>216</sup>

As Ricardo Padrón argues, the process was simultaneously one of providing accurate description and one of drawing from existing imaginaries to explain the New World.<sup>217</sup> Thus, these documents were more than merely descriptive, bureaucratic instruments—they were worlds unto themselves, constantly being reshaped by the authors (*Velasco, Relaciones respondées*) as more information became available. Because these documents held such innate

<sup>215</sup>Vilches, 106.

<sup>216</sup>From the *Relación Geográfica de Zempoala* (1580), in <http://colonialmexico.blogspot.com/2013/01/water-water-los-arcos-de-zempoala.html>.

<sup>217</sup>Ricardo Padrón, *The Spacious Word: Cartography, Literature, and Empire in Early Modern Spain* (Chicago: University of Chicago Press, 2004), 74-5.

power, they brim with multiple, interweaved discourses that demand scholarly attention.

Environmental discourses—how these texts chose to portray the physical environment of Latin America to Philip—and discourses about history are the primary focus here.

Before examining the language of the cosmographical-historical texts of the 1570s, they must be placed in the historical context of sixteenth-century Spanish exploration and governance reforms. First, the spirit of these New World reforms was fueled by the inquisitiveness and thirst for knowledge that characterized the early Spanish empire in general and Philip II in particular. Beginning with Hernán Cortés, Elliott argues that Spanish exploration and conquest was shaped “by this desire to see and know.”<sup>218</sup> Cortés vocalized this desire when he explained to another official that it was “a universal condition of men to want to know.”<sup>219</sup> But what did Cortés and the conquistadors want to know? As chapter two discussed, the conquistadors wanted to spread Spanish settlement and gain more power for themselves. This meant that the knowledge they recorded for the Crown was advertising. They needed the Crown to fund further expeditions, so they provided knowledge that supported their claims about the promise of new territories. Throughout the sixteenth century, there existed a tension in Spanish imperialism between knowledge for its own sake and practical, utilitarian forms of knowledge. On the one hand, as Elliott argues, “the need to obtain authentic information about a totally unknown world forced the Spanish Crown to arrange for the collecting of evidence on a massive scale.”<sup>220</sup> But there was also the “stimulus of practical considerations—the need to exploit the resources of America and to govern and convert its peoples—which compelled Europeans...to organize and classify their

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<sup>218</sup>John Huxtable Elliott, *The Old World and the New 1492-1650*. (Cambridge, England: Cambridge University Press, 1970), 30.

<sup>219</sup>Hernán Cortés, *Cartas y Documentos*, ed. Mario Hernández Sánchez-Barba (Mexico, 1963), 478; in Elliott, 30.

<sup>220</sup>*Ibid.*, 36.

findings within a coherent frame of thought.”<sup>221</sup>

In 1535, the naturalist Gonzalo Fernández de Oviedo declared in the opening pages of his *Historia Natural de Las Indias*: “I seek to signify and give understanding toward true cosmography.” Oviedo was the first European with first-hand knowledge of the New World to attempt a history, so Oviedo sought to legitimize his task: he was the eyes of the Crown and it was up to him to provide an accurate account. For textual precedents to the work he was attempting, there were only military and navigational accounts.<sup>222</sup> As Oviedo expanded upon the motives of his *Historia Natural*, he claimed that “naturally all men desire to know, and rational understanding is that which makes them better than any other animal.”<sup>223</sup> This statement echoed Cortés in that it treated humanity as a universal category. It also portrayed the pursuit of knowledge as natural to humanity and as something that should be pursued for its own sake. But while Oviedo sought to be a perfect observer for the Crown, he struggled with what to do with the sheer enormity and exoticism of the Americas.

Oviedo succinctly describes the problem at hand in writing a true cosmography when he asks, “What mortal mind could comprehend such diversity of languages, habits [and] customs of the peoples of these Indies? Such variety of animals, both domestic and wild and savage? Such an unutterable multitude of trees, [some] laden with diverse types of fruit, and others barren, both those that the Indians cultivate and those produced by Nature’s own work, without the help of

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<sup>221</sup>Ibid., 32-3.

<sup>222</sup>Myers, 2 and 19.

<sup>223</sup>“Quiero significar y dar á entender por verdadera cosmographia , que aqui yo no tracto de aquestas Indias que he dicho; sino de las Indias , islas é tierra firme del mar Océano , que agora está actualmente debaxo del imperio de la corona real de Castilla, donde innumerables é muy grandes reynos é provingias se incluyen ; de tanta admiración y riquezas , como en los libros desta Historia general é natural destas vuestras Indias será declarado. Por tanto, suplico á Vuestra Cesárea Magestad haga dignas mis vigalias de poner la mente en ellas ; pues naturalmente todo hombre dessea saber , y el entendimiento racional es lo que le haze mas excelente que á otro ningún animal...” In Gonzalo Fernández de Oviedo y Valdés and Juan Pérez de Tudela Bueso, *Historia general y natural de las Indias* (Madrid: Ediciones Atlas, 1959), Epístola dedicatoria and 1.



mortal hands?”<sup>224</sup> Here Oviedo treats the diversity and plenty of the New World as both a potentially beneficial work of God and also as a problem beyond mortal minds. Oviedo painted an exotic landscape that possessed flora and fauna beyond anything old Europe could imagine. This comes through most explicitly in his discussion of the pineapple. Oviedo describes the pineapple as “one of the most beautiful fruits that I have seen in the entire world in which I have walked.”<sup>225</sup> Hyperbole was the order of the day; not only was the nature of the New World completely foreign, but it was almost mythic: “none of these [trees], or many others I have seen, have fruits likes these pineapples or artichokes, nor do I think there is an equal to these things [i.e. pineapples, other American fruits] of which I will now speak.”<sup>226</sup> Oviedo’s descriptions were paradoxical in a way: he was asking his audience to believe his first-hand observation of these things, but what he was describing was paradise on Earth.

There were innumerable people, innumerable languages, and innumerable and diverse resources. The very act of naming the pineapple was made difficult by the sheer number of languages one could use to describe it in the New World: “in all of these islands is fruit like I have said; because in all of these [islands] and on Tierra-Firma...the Indians have many and diverse languages, so [the fruit] is given diverse names. In Tierra-Firma, there are at least four or five languages across twenty or thirty leagues.” The fruits of the Caribbean may have had a multitude of names, but they were still vital for the fledging Spanish communities there. Oviedo claims that “this [pineapple] is one of the main reasons why the few Christians in those parts

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<sup>224</sup>¿Qual ingenio mortal sabra comprehender tanta diversidad de lenguas, de hábito, de costumbres en los hombres destas Indias? Tanta variedad de animals, assi domésticos como salvajes y fieros? Tanta multitude inarrable de árboles, copiosos de diversos géneros de fructas, y otros estériles, assi de aquellos que los indios cultivan, como delos que la natura de su propio ofiçio produce, sin ayuda de manos mortals? In Book 1 of Oviedo, 2. 9

<sup>225</sup>“...una de la mas hermosas fructas que yo he visto en todo lo que del mundo he andado.” In Book 7, Chapter 14 of Oviedo, 280.

<sup>226</sup>“Ninguna destas, ni otras muchas que yo he visto, no tuvieron tal fructa como estas piñas o alcarchophas, ni piensso que en el mundo la hay que se le iguale en estas cosas juntas que agora diré.” In Book 7, Chapter 14 of Oviedo, 280.

sustain themselves amongst these barbarous peoples.”<sup>227</sup> Whether Oviedo realized it or not, he was painting the New World as an untapped reservoir of resources, a depiction that later cosmographers would continue using.

This process of intelligence gathering continued, and intensified, when the Spanish throne changed hands in 1556. When Philip II took the Spanish throne, he brought with him both a desire to streamline the imperial bureaucracy and his personal attentiveness to learning and knowledge. Kamen posits that Philip II wanted “quite simply, to know.” He viewed himself as the king of a universal empire and sought to use the powers of the empire to obtain knowledge. For Philip, this famously took the form of collecting and classification. Spaniards returning from the New World brought exotic plants and animals for their king’s personal collection in the Escorial. Philip II acquired vast libraries of Arabic books, New World medicinal plants, and Renaissance paintings from Italy. The king’s access to the cultural and biological wealth of Europe and the Americas made him a “collector *par excellence*.”<sup>228</sup> In his European domains, Philip II applied a similar logic to information gathering. In 1559, the king established simultaneously a General Visitation for each of his three dominions in the Italian peninsula, “partly in order to accumulate and collate information about them.” He also commissioned a series of cityscapes for his Dutch territories.<sup>229</sup> These various projects demonstrated what Parker has termed Philip II’s “genuine and almost inexhaustible curiosity.” His curiosity centered, in particular, on geography. The mathematician and cosmographer Pedro de Esquivel, with the blessing of the king, issued orders in 1566 “to note down by personal observation the actual

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<sup>227</sup>“En estas islas todas es fructa qual tengo dicho y muy comun, porque en todas ellas y en la Tierra-Firme las hay, y como los indios tienen muchas y diversas lenguas, assi por diversos nombres la nombrar, á lo menos en la Tierra-Firme en veynta ó treynta leguas acaerçe aver quarto ó çinco lenguas, y aun esso es una de las causas principales porque los pocos chripstianos en aquellas partes se sostienen entre estas gentes bárbaras.” In Book 7, Chapter 14 of Oviedo, 281.

<sup>228</sup>Kamen, 190-1.

<sup>229</sup>Geoffrey Parker, *The Grand Strategy of Philip II* (New Haven: Yale University Press, 1998), 58-9.

location of all places within the Spanish empire, including “rivers, streams and mountains, however small they may be” so that “the description of Spain may be as exact and complete, as detailed and excellent, as His Majesty desires...”<sup>230</sup> Geographic description, while reflecting the king’s own intellectual curiosity, was also thought to possess practical applications. In the *privilegio* of Juan Fragoso’s 1572 work, *Discursos de las cosas aromaticas arboles y frutales y de otras muchas medicinas simplices que se traen de la India Oriental*, the privilege declared that his work would be both “useful and profitable” (*útil y provechoso*) to the King.<sup>231</sup> As Crafton argues, early modern Spaniards viewed the New World’s plant-life as a “God-given pharmacy” due to the therapeutic benefits offered by the newly-discovered plants.<sup>232</sup> Spanish authorities patronized botanists and naturalists for reasons beyond resource exploitation: they searched for ways to improve the health of their people in the forests of the New World. Philip II would bring this collecting impulse, bureaucratic mind, and geographic curiosity to bear in his American possessions.

Philip II approached the task of incorporating the Americas into the European mental universe with fervency. During the 1560s and 1570s, Philip II applied the desire for knowledge and description to a new problem: the inefficiencies of Spanish leadership in the Americas. In his handling of these problems, he revealed another facet of his administrative style. As Parker notes, the king “constantly sought to update and extend his personal knowledge... ‘through the eyes of those who describe them.’”<sup>233</sup> The king, ruling over an extensive oceanic empire, entrusted his ministers with the responsibility of collecting information about his territories and

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<sup>230</sup>Parker, *Philip II* (Boston: Little, Brown, 1978), 47-9.

<sup>231</sup>Juan Fragoso, *Discursos de las cosas aromaticas arboles y frutales y de otras muchas medicinas simplices que se traen de la India Oriental* (Madrid, 1572), Privilegio.

<sup>232</sup>Anthony Grafton, April Shelford, and Nancy G. Siraisi, *New Worlds, Ancient Texts: The Power of Tradition and the Shock of Discovery* (Cambridge, Mass: Belknap Press of Harvard University Press, 1992), 162.

<sup>233</sup>Parker, *Grand Strategy*, 58.

administering reforms. Juan de Ovando emerged as the king's most active and influential minister. Philip II appointed Ovando with the unenviable task of reforming the Spanish administration of the Americas: codifying the region's laws, collecting geographical and historical knowledge, and providing protection to the region's indigenous peoples. As Stafford Poole argues, Ovando played a pivotal role in Philip II's administration but relatively little literature exists that details Ovando's contributions to the Spanish empire.<sup>234</sup> Starting in 1567 and ending in 1571, Ovando conducted an investigation of the Council of the Indies. This official inquiry, or *visita*, exposed several problems, namely the "ignorance of the councilors" and the "lack of knowledge of existing laws."<sup>235</sup> After 1571, Philip II appointed Ovando as president of the Council of the Indies to continue the work of reform. On the Iberian Peninsula, Ovando supervised the compilation of the *Relaciones topográficas*, while simultaneously preparing a similar set of questionnaires for the Americas. The number of questions for the Americas was initially 200 in 1571 but shrunk to 135 by 1573. In addition, Ovando sent botanists, zoologists, herbalists, and cartographers "to gather specimens, make drawings of the flora and fauna, and prepare maps of Philip's overseas possessions."<sup>236</sup>

In 1571, as president of the Council of the Indies, Ovando proposed the creation of a "chronicler and cosmographer of the Indies" and commissioned a "series of geographical and territorial investigations to elicit information on the New World."<sup>237</sup> In coordination with Philip II, Ovando selected for both tasks Juan López de Velasco, who was Ovando's close colleague and secretary during the *visita* of the Council of the Indies in 1567-71. As the cosmographer-chronicler of the Indies, Velasco had two primary responsibilities: "to provide an exact record of

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<sup>234</sup>Poole, 21.

<sup>235</sup>*Ibid.*, 116-7 and 138.

<sup>236</sup>Parker, 61.

<sup>237</sup>*Ibid.*, 9.

the Spanish achievement in America in the face of foreign calumnies, and to reduce shameful ignorance of the councilors of the Indies about the lands under their jurisdiction.”<sup>238</sup> Velasco responded with two works: “A geography and general description of the Indies” and “A demarcation and divisions of the Indies.” These works, later combined into the *Geografía y Descripción Universal de las Indias*, displayed in cartographic and written form all that was known about the Americas up to that point. On September 24 of 1571, the Council of the Indies expressed the purpose behind the document:

We order and mandate that the members of our Counsel of Indies, with careful study and care, seek to make a description and complete inquiry of all the things involved with the state of the Indies...and to keep a book of the said description in the Counsel.<sup>239</sup>

After several years, Velasco’s work was presented to the Council of the Indies in 1574-5.<sup>240</sup> The work of Ovando and Velasco in the *Descripción universal de las Indias* and *Relaciones* was an attempt to answer the call of reform and a way of tackling the more profound problem of integrating the New World into existing forms of knowledge. Their work perfectly synthesized the empire’s drive for knowledge while addressing practical concerns about good government in the New World. As the following analysis of Velasco’s treatise demonstrates, the *Descripción Universal de las Indias* echoed Cortés’ earlier precept about man’s drive to knowledge. Thus, the document was simultaneously of the moment in the 1570s, but also reflected the continuing Spanish obsession with classification during the sixteenth century.

Through the reign of Philip II, the Spanish monarchy sought to hide information about the New World from outsiders, meaning that cosmographical texts were often unpublished. The

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<sup>238</sup>Elliott, 38.

<sup>239</sup>“Ordenamos y mandamos que los de nuestro Consejo de Indias con particular estudio y cuidado, procuren tener hecha siempre descripción y averiguación cumplida y cierta de todas las cosas del estado de la India...y tengan un libro de la dicha descripción en el Consejo...” In “Ordenanzas Reales al Consejo de Indias,” 24 September, 1571; in Juan López de Velasco, *Geografía y descripción universal de las Indias* (Madrid: Ediciones Atlas, 1971), viii.

<sup>240</sup>Parker, 61-3.

Reformation and ensuing Counter-Reformation engendered a suspicious atmosphere in the Spanish royal court, leading to careful management and monitoring of the activities of mapmakers, editors, and chroniclers.<sup>241</sup> Philip II especially treated these texts as state secrets, but his son and successor, Philip III, encouraged his cosmographers to publish their findings. Portuondo marks the ascension of Andrés García Céspedes as royal cosmographer in 1596 as the “definitive divorce of the descriptive and mathematical practices associated with Renaissance cosmography.”<sup>242</sup> But for the time being, we will take a closer look Velasco’s work and see his cosmography in action.

*History and Environment in the Geografía y Descripción Universal de Las Indias*

By taking a closer look at the language being used by Velasco and the *Relaciones*, I hope to answer several important questions: how did the Crown, specifically Philip II, imagine the New World and its environment? What were some of the resources and knowledge the Crown hoped to gain by sending Velasco? Which values did Velasco uphold? Goodman provides an excellent clue, arguing that beyond the pursuit of science, Spanish officials had a desire “to bring organization into everything concerning the monarchy.”<sup>243</sup> The natural world became a vital actor in this pursuit, since it shaped mental imaginaries through which Spanish power interacted with the New World. Perhaps the most vital task Velasco had was to situate the New World in time and space. As Elliott explains, “America, as an entity in space, demanded incorporation into Europe’s mental image of the natural world. And America, as an entity in time, required

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<sup>241</sup>Simon Pinet, “Literature and Cartography in Early Modern Spain: Etymologies and Conjectures,” In *Cartography in the European Renaissance*, edited by David Woodward, 469-476 (Chicago: University of Chicago Press, 2007), 470.

<sup>242</sup>There was a shift in the system of patronage after Philip II’s reign that led to the relaxing of cosmographical secrecy. For more detail, see Portuondo, 7-8.

<sup>243</sup>David Goodman, *Power and Penury: Government, Technology, and Science in Philip II's Spain* (Cambridge: Cambridge University Press, 1988), viii.

integration into Europe's conception of the historical process."<sup>244</sup> Until these two objectives were met, the Americas would remain exotic and their governance lacking.

Velasco reformulated the intellectual tradition of the Renaissance into an administrative tool of empire. In addition to looking to Antiquity for inspiration, Velasco was also inspired by an earlier project of somewhat murky origins, the *relaciones topográficas*, which consisted of maps and questionnaires for Spain's Iberian territories. His *Geografía y descripción* consisted of 674 folios. Another project of Velasco's, the *Descripción y demarcación de las Indias Occidentales* (1574), consisted of 150 folios and 14 maps. In both cases, he used Ptolemy's *Geography* as an inspiration.<sup>245</sup> Velasco's maps testified to a unified vision of the Spanish empire and his efforts, along with the efforts of Spanish cartographers as a whole, eclipses the efforts of other kingdoms' cartographers in the sixteenth century. Portuguese map-makers were not as detailed, since they did not plan to settle as much land in the Americas. English map-making was largely a private enterprise. Only the Dutch came close to mirroring Spain's efforts.<sup>246</sup>

The structure of *Geografía y Descripción Universal* revealed the geographic portion of Velasco's dual historical-geographical project. Velasco frequently blurred the lines of analysis separating political history, myth, geographic description, and botanical knowledge. In the initial sections of the "Demarcation," Velasco began by describing the geographical limits of Spain's New World possessions: "it is all the land and seas...in a hemisphere or half of the world from 180 degrees of latitude." This vast swath of territory, apportioned to the Spanish by the

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<sup>244</sup>Elliott, 39.

<sup>245</sup>Portuondo, 172-3 and 208; and Carrera, 40.

<sup>246</sup>David Buisseret, "Spanish Colonial Cartography, 1450-1700," in *Cartography in the European Renaissance*, edited by David Woodward, 1143-1171 (Chicago: University of Chicago Press, 2007), 1146 and 1171-2.

Pope in the Treaty of Tordesillas of 1494, was collectively known as the “New World.”<sup>247</sup> Having established the geographical limits of the New World, Velasco was still flummoxed by where exactly the New World ended and whether or not it had already been known to the Old World. In the subsection “The First Settlement in the Indies,” Velasco attempted to place the New World into a historical context—or, more precisely, a historical and geographical context that Europeans could understand. “It is not clear,” said Velasco, “if the continent of the Indies is cut with some strait in the northern part where one can pass from the northern sea to the southern one, or if it arrives at a connection with a third part of the world that is called Asia.”<sup>248</sup> The original purpose of Columbus’ voyage was to find a quick route to Asia via the Atlantic. Even after it became clear that the New World was a distinct landmass from Asia, that original burning desire to find a shortcut to Asia remained.

Eighty years after its discovery by Europeans, the New World remained a mysterious place in the mind of Velasco. Perhaps the Ancients could provide some answers: “some hold for certain what Plato writes in *Timaeus of Locri*, that in the Atlantic sea, that is the Gulf of the Mares to the Canaries and from there ahead to the West to the Indies, there was a land more spacious and large than Africa and Europe, and there lived the Indians.” The following passage appears to be a qualification on Velasco’s part as he attempted to historicize the New World. “It is not considered to be authentic history, nor is it a given that Plato, in the said dialogue, wants that to be to the order and constitution of the Universe, that such a large part of it (the Universe) perished and fell to a flood.” The historical roots of the New World were difficult for Velasco to unearth and his range of sources proved inconclusive. His historical conjecture ranged from Plato

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<sup>247</sup>“...es toda la tierra y mares comprendidos en un hemisferio ó mitad del mundo de 180 grados de latitude.” In Velasco, *Geografía y descripción universal de las Indias*, 1.

<sup>248</sup>“No está descubierta, ni averguado, si la tierra continente de las Indias, que se va prolongado del mediodía para el norte, se corta con algún estrecho por la parte septentrional por donde se puede pasar de la mar del Norte á la del Sur, ó si llega á continuarse con la tercera parte del mundo que llaman Asia.” In *ibid.*, 2.



to the Bible, where he noted that “some Jewish ceremonies” had been witnessed in the Indies. Perhaps the lost tribe of Israel had wandered into the New World in Biblical times?<sup>249</sup> The task of writing a history for the New World required tools beyond Velasco’s grasp at this point and reflected the multitude of epistemological traditions he called upon. At best, he could only traverse into quasi-mythical territory. Velasco’s difficulty with historicizing the New World would be reduced partly by the *Relaciones Geográficas* that would appear later. If we think of the *Descripción Universal de las Indias* and the *Relaciones* as two parts of one giant project, then it is easier to forgive Velasco’s historical conjectures. Geography and description dominated the *Descripción Universal de las Indias*, but as will be seen, Velasco’s brief foray into history here would prove useful to him later in the work.

Velasco dedicated substantial portions of text to demonstrating how a province’s geographic location had consequences for the health or illness of a province. According to Velasco, “in everywhere that has been discovered between the two tropics, due to the perpetuity of the weather, health is more constant and continual than other regions closer to the poles.” These regions, by comparison, were characterized by “the flexibility of the seasons and the inconsistency of extreme hot and cold.” This had direct consequences for a province’s health, since inconsistent temperatures “continuously cause disinclinations and illnesses.” Velasco also made distinctions between high and low elevations: “higher and fresher lands in the region of the Equinoctial and tropics [are] commonly more healthy than lower lands that are always hot and excessively humid.”<sup>250</sup> The distinction between high elevation and low elevation environments

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<sup>249</sup>“Y aunque algunos tienen por cierto lo que escribe Platón en el Timeo, que el mar Atlántico, que es el golfo de las Yeguas hasta las Canarias y de allí adelante al occidente para las Indias, fué tierra firme más grande y espaciosa que es África y Europa, y que de allí quedaron pobladas las Indias...no se tiene por historia auténtica, ni consta que Platón en el dicho diálogo quiere que lo sea, ni tampoco cuadra á la orden y constitución del Universo, que una tan grande parte de él pereciese y se viniese á anegar.” In *ibid.*, 2.

<sup>250</sup>“En todo lo descubierto lo que está entre los dos trópicos, por la perpetuidad de su temperie, es de más constante y continúa salud que las otras regiones que se van allegando á los polos, adonde la inconstancia de los

had special significance for a Mediterranean society like early modern Spain: lower elevations were areas where swamps and marshland primarily dominated. The constant threat of malaria and yellow fever made these areas deathtraps and affected settlement patterns. Therefore, the link Velasco drew between high and low elevations was not entirely new. The simplicity of his schematization is what marks this as important, however. Compared to the *Relaciones Geográficas*, the *Descripción Universal de las Indias* was a cursory glance at the New World. Velasco's task was to streamline all of the information he had about the New World into something that could be read to the authorities in Spain. The process of simplification—employing a strict health-sickness binary to describe New World territories—aided Velasco in his presentation.

In describing the maintenance of the New World provinces, Velasco continually used a health-sickness binary: “the health or sickliness of the provinces follows upon the good or bad temperament of the provinces.”<sup>251</sup> The word “temperament” seems mysterious in this context, since it could have referred to the content or discontent of the provinces' peoples, or it could have referred to the conditions of the land itself.<sup>252</sup> The distinction between the health of the land and the health of people became blurrier as Velasco continued setting the New World stage. Velasco argued that there was a link between so-called “healthy air” and the overall health of a province's people: the New World was a place where there was “salubrious and healthy air,” and a place where “the common people usually live healthier and freer from illnesses than in this

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tiempos y paso de mucho calor á mucho frio y al contrario, causa continuas indisposiciones y enfermedades; suelen ser las tierras altas y frescas en la región de la Equinoccial y trópico, y comúnmente más sanas que las bajas que siempre son calurosas y húmedas en exceso.” In *ibid.*, 6-8.

<sup>251</sup>“...comúnmente la sanidad ó enfermedad de las provincias sigue al temperamento bueno ó malo de ellas...” In *ibid.*, 6.

<sup>252</sup>Luis Urteaga offers an excellent, concise examination of how medieval and early modern Europeans imagined the relationship between geography and health. See Luis Urteaga, “La teoría de los climas y los orígenes del ambientalismo,” *Cuadernos críticos de geografía humana*, <http://www.divulgameteo.es/uploads/Teor%EDa-climas-Ambientalismo.pdf>.

other ancient New World.”<sup>253</sup> This statement had multiple connotations. There was a connection between a region’s environment and the overall health of its inhabitants. It also added a new layer to the meaning of the word “temperament.” These passages occurred in conjunction with one another, casting doubt on the idea that “temperament” meant only obedience or rebelliousness in Velasco’s mind. Instead, temperament described an intimate link between humanity and the physical environment. Modern historians would be quick to call this environmental determinism on the part of Velasco, but Velasco cannot be read in such a simple materialist light.<sup>254</sup> Velasco lacked modern scientific knowledge about climate and biology to make such a sweeping claim as environmental determinism, but he could trace basic patterns of causality. “Temperament” implied that a province and its people shared an essential essence that made it possible for them to be thought of as an integral unit—the sickness of one affected the other. Anthony Grafton analyzes the medical connotations of the word “temperament.” The Galenic medical tradition, still the driving force behind European medicine, said that “all things had temperaments” and that they were determined by “the dominance of one quality over another.”<sup>255</sup> Since environmental observation was so crucial a part of Velasco’s text, the physical environment played a key role in describing a province in its totality to the authorities in Spain.

Later, Velasco expanded on the implications of his beliefs about environment and provincial health. Another issue was confusing to him: mortality and indigenous morality. For Velasco, indigenous peoples in the New World “live healthily,” but “few enjoy a very long life.” Why was this true in his eyes? He argued that indigenous peoples did not enjoy the “little gift

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<sup>253</sup>“...lo más de lo descubierto de las Indias, es de cielo y aire salutífero y sano, y adonde los hombres de ordinario viven más sanos y libres en enfermedades que en estotro Nuevo Mundo antiguo.” In *ibid.*, 6.

<sup>254</sup>This may be a simplistic reading of environmental history on my part, but a large segment of environmental history has Marxist roots. Whereas previous materialistic thinkers argued that economics were the basic engine of history, environmental historians of the Marxist school argue that environmental forces, along with modes of production, are the prime movers of history.

<sup>255</sup>Grafton, 163.

and comfort of human life of foods, beds and clothing.” But he also believed that “the disorderly and clumsy beastliness of the vices in which they live” was another answer.<sup>256</sup> Velasco was trying to reconcile his belief that the New World was an essentially salubrious place with the idea that the indigenous peoples of the region did not have long lifespans. For answers, he again turned to environmental causes. As he noted later, “the natives of these parts are of good stature, rather larger than smaller, although those from warmer lands, being as understood as being between the two tropics, are usually of smaller body and weaker and thinner from the relaxation of the heat and vices that were bred in colder parts and outside of the tropics.”<sup>257</sup> The consistently warm climate of the Spanish New World, in Velasco’s mind, simultaneously promoted good health but also a tendency toward laziness and vice. As we will see in chapter four, later Spanish intellectuals would argue for a different relationship between man and nature, one where a landscape reflected and was molded by the work ethic and moral values of the people inhabiting it. Velasco’s writing reflects some strains of this type of thought. American indigenous culture came about as a result of environmental conditions. Certain geographic conditions could make people act in certain ways, but people could also mold landscapes into whatever they desire via civilization.

Velasco’s belief, that the indigenous peoples suffered because they had not been exposed to the rudiments of civilization like beds and clothing, reflected the belief that the New World environment was an untapped reservoir of resources and healthy living space. The other implication was that indigenous peoples, despite their environmental bounty, had failed to utilize

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<sup>256</sup>“Y aunque los naturales de ellas viven sanos, llegan pocos á muy larga vida, que en parte debe ser por el poco regalo y comodidad que tienen para la vida humana de comidas y camas y vestidos, y en parte por la desordenada y torpe bestialidad de vicios en que viven.” In *ibid.*, 6.

<sup>257</sup>“los naturales de aquellas partes son de buena estatura, antes grandes que pequeños, aunque los de las tierras calientes, comprendidas entre los dos trópicos, son por lo ordinario de menor cuerpo, y más débiles y flacos por la relajación del calor y vicio de la tierra, que los criados en partes frias y fuera de los trópicos... adonde se ven los hombres de cuerpos muy crecidos.” In *ibid.*, 14.

this reservoir. While this is not groundbreaking in terms of European imperialism and its various “civilizing missions,” the fact that this discussion takes place in conjunction with Velasco’s conjecture about provincial environmental conditions points to a larger issue of how early modern Europeans conceptualized the New World environment. When Europeans initially encountered the New World, they brought with them a package of preconceived notions about how civilization should progress. Their theory of history rested on the idea of a spectrum of civilization, with barbarism characterizing earlier stages and Renaissance Europeans characterizing the later stages.

As Anthony Pagden posits, Aristotelian notions of natural slavery formed a part of European relations with American indigenous peoples. For Aristotle, there was a relationship between physical stature and one’s station: the “natural slave should always be equipped with a powerful body capable of performing the labors nature has assigned to him.”<sup>258</sup> Early modern Europeans, in the form of Neo-Scholastics like Domingo de Soto and Francisco Suárez, argued that God’s eternal law was engraved in the minds of men according to collective nature and that men could discern this law “through his natural reason alone.”<sup>259</sup> Neo-Scholastics were also concerned with “the nature of man’s duties in this life” and “linking man’s nature with a certain pattern of behavior.”<sup>260</sup> Velasco ran with this idea, and attempted to make ties between climate, geography, and one’s station in life.

Europeans imagined the New World in a variety of ways, but in Velasco’s case, utopian visions of a healthy climate dominated his thought and fueled his negative assessment of indigenous peoples. The New World and its peoples reflected a simpler form of civilization

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<sup>258</sup>Anthony Pagden, *The Fall of Natural Man: The American Indian and the Origins of Comparative Ethnology* (Cambridge [Cambridgeshire]: Cambridge University Press, 1982), 44-5.

<sup>259</sup>J. A. Fernández-Santamaría, *Natural Law, Constitutionalism, Reason of State, and War: Counter-Reformation Spanish Political Thought, Volume 1* (New York: Lang, 2005), 93-4.

<sup>260</sup>Fernández-Santamaría, 109.

because its environment made it so. Dense, forest-dominated landscapes, vast and exotic displays of flora and fauna—these things provided a stark contrast to what had already become a town-based European society. The so-called “pristine wilderness” of the New World was a place where Europeans could gain a healthy respite from civilized life.<sup>261</sup> But Velasco stopped himself from going too far down the utopian path. While the environment itself fostered good health, the indigenous people still died young. Therefore for Velasco, the indigenous peoples must have been doing something incorrectly; they were not taking advantage of the natural benefits their environment brought them.

Not all indigenous people were lost in Velasco’s eyes however. He spelled out this idea in another passage. The arrival of the Spanish and their civilization brought benefits that were already bearing fruit. “Contrary [to the idea] that at the beginning [the provinces] were considered sick and unhealthy, already notable improvement is found.” Perhaps, Velasco mused, “some heavenly constellation favors them.” Or maybe “the tracks of the many cattle that have been put in the land” had helped soothe the provinces.<sup>262</sup> It comes as no surprise that Velasco would attribute the improvement of a province’s health to the introduction of cattle. As Elinor Melville and others have demonstrated, the introduction of Spanish livestock to New World environments was viewed both as natural and as a prerogative of colonization. These agents of empire were an important part of Velasco’s conception of a healthful province. Their presence (the tracks of the animals in this case) was an important indicator of Spanish civilization. The picture Velasco was painting for Crown and Council was one of unfulfilled potential and

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<sup>261</sup>“Pristine wilderness” was the idea that New World landscapes had been left untouched by civilization and were, therefore, rich reservoirs of resources for Europeans. They were also places where one could escape the evils of civilization. The “noble savage” comes from the same intellectual vein.

<sup>262</sup>“En otras, al contrario que al principio fueron tenidas por enfermas y mal sanas, se halla ya notable mejoría, ó por alguna constelación celeste que las favorece ó por haber desenconado el aire con la huella de los muchos ganados que en la tierra se han metido.” In *ibid.*, 6.

progress.

Why does the description of the actual indigenous culture arrive so late in the opening passages of the *Descripción Universal de las Indias*? The knee-jerk answer would be that Velasco was sizing up the New World landscape in terms of what the empire hoped to gain from it. Thus, sections on mineral wealth and trees occupied the opening pages while indigenous people appear later almost as an afterthought. Elliott and Crafton argue that early modern Europeans were handcuffed by centuries of medieval education and tradition.<sup>263</sup> By looking at the structure of this opening passage, however, another solution presents itself. Velasco was, in effect, building a world from scratch in terms that were understandable to the Crown. He located the Americas in space by outlining the geo-political boundaries of Spain's American territories and then located those territories in time by discussing their history. Once he had properly situated the territories in space and time, then he could dedicate text to the peoples and institutions within those territories. Velasco dedicated an almost equal amount of text to describing the culture and peoples of the Indies. Since Velasco believed that geography could give people insights into provincial health, the work ethics of natives, and mortality, starting with geographical description was the obvious choice. It is also worth noticing that Velasco moved from describing abstract ideas, like political boundaries and the health of the land, to more concrete realities like minerals, birds, and people. Though the *Descripción Universal de las Indias* was undoubtedly an imperial text, one cannot easily write it off as purely an anti-indigenous tract. In doing so, one would obscure the document's more nuanced constructions of human history, physical space, and the environment.

One work which attempted to integrate indigenous people and used indigenous imagery was Bernardino de Sahagún's 1580 work, the *Historia general de las cosas de Nueva España*, or

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<sup>263</sup>See Elliott, 16-7, and Grafton, 47-8.

the *Florentine Codex*. It examined the local history, political, and social life of the Nahuas, Central Mexico's indigenous inhabitants. Rising from the "conflict and dialogue between the native people and the European invaders," the Codex consisted of three leather-bound tomes, all completed around 1580. This was a humanistic project, characterized by learning through a body of "systemized knowledge." Sahagún gave questionnaires to the region's authority figures who then constructed painted documents. These documents were then channeled through indigenous grammarians and painters who transformed the questionnaire into a bifurcated record with the original Nahuatl on the right and the Spanish translation on the left. Sahagún modeled his treatise on the work of Pliny the Elder (b. 23 AD), whose own *Naturalis historia* served as a vast encyclopedia of the natural world during Antiquity. Sahagún, like his humanist contemporaries, looked to Antiquity as the source of all knowledge. Thus, his Florentine Codex mirrors Pliny's own classifications for natural resources, especially precious metals.<sup>264</sup> Sahagún believed that the Codex would help in the conversion of indigenous peoples by understanding and recording the words and metaphors that defined their idolatry.<sup>265</sup> Despite Philip II's general desire to keep Spain's cosmographical works secret, he nevertheless made the *Florentine Codex* into a wedding gift for Francis I of France.<sup>266</sup> The Spanish empire was the most powerful political entity in sixteenth-century Europe, but it was also the leading producer of knowledge, as demonstrated by Philip's gift.

### *Analysis of the Relaciones*

Barbara Mundy provides an excellent treatment of the *Relaciones* in her *Mapping of New*

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<sup>264</sup>Diana Magaloni Kerpel and Cuauhtémoc Medina, *The Colors of the New World: Artists, Materials, and the Creation of the Florentine Codex* (Los Angeles: The Getty Research Institute, 2014), 1,3, and 6.

<sup>265</sup>Kerpel and Medina, 13.

<sup>266</sup>Portuondo, 170.



*Spain*. Focusing on indigenous cartography, she lays out the cartographic devices which simultaneously allowed for indigenous self-expression and for suppression by colonial officials. But what of the texts of the *Relaciones*? For Mundy, the translation of indigenous language into Spanish by colonial officials acted as a filter, obscuring the indigenous voice.<sup>267</sup> Maps allowed indigenous peoples to escape from the limiting conventions of Spanish writing. While explaining the dependence on texts by early modern Spanish officials, Mundy argues that colonial officials had an “anti-image” bias.<sup>268</sup> Mundy is correct in her assertion that texts coming from the New World passed through the hands of colonial officials, who then translated them and made them presentable to officials in Spain. Both the maps and the texts of the *Relaciones* fulfilled the same purpose: they were descriptive devices, a way of organizing knowledge that Spanish authorities could comprehend. A common narrative device of these maps and texts was to compare New World animals with Old World examples. While this was helpful for the Crown in that it familiarized the exotic, it had the side effect of obscuring the New World’s unique flora and fauna.<sup>269</sup>

Cartography also dominates the work of Ricardo Padrón. He demonstrates how the manipulation of space, specifically maps, factored into Spanish imperial thought. For Padrón, maps were simultaneously “instruments and symbols of power.”<sup>270</sup> They made it possible to navigate exotic lands and account for an area’s resources, but the very fact that a land *could* be mapped was a form of control unto itself. Padrón discusses the *Relaciones* and the maps which accompanied them, but his treatment of the text of the *Relaciones* is narrow. While he is correct that maps provided visual reminders of empire and were a way of claiming space, the texts

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<sup>267</sup>Mundy, 32.

<sup>268</sup>*Ibid.*, xix and 30.

<sup>269</sup>Margaret J. Osler, *Reconfiguring the World: Nature, God, and Human Understanding from the Middle Ages to Early Modern Europe* (Baltimore: Johns Hopkins University Press, 2010), 41-2.

<sup>270</sup>Padrón, 8.

themselves performed many of the same functions. They provided real geographic information, but they did so in a way that was familiar to Peninsular readers. Furthermore, these texts called upon some of the same tools as a map, evoking visual imagery, metaphor, and history to tell a specific story to a reader. This chapter's contribution to Padrón's work has been to demonstrate that early modern Spanish maps and these geographic texts came from the same vein of thought. The following analysis of the *Relaciones* does not attempt to rescue the voice of the indigenous peoples of the New World. Instead, it will examine how indigenous peoples, their history, and their environment were molded into existing schematics of early modern Spanish knowledge.

When the king of Spain wanted information about his colonies, he would first issue a *real cédula* (royal edict). These royal edicts compelled his colonial viceroys and governors to collect information on his behalf in the form of questionnaires. Between 1530 and 1812, the Crown sent out about thirty questionnaires. The questionnaires would then be compiled into natural and administrative texts known as *relaciones geográficas*. Between 1578 and 1586, the Crown received 191 responses to its 1577 questionnaire. The present location of 167 of these *relaciones* is known.<sup>271</sup> As Portuondo argues, Velasco's questionnaires represented a "significant departure" from the methodology of previous cosmographies. Where previous cosmographies depended on first-hand observation by the author to gather a true accounting, the questionnaires disseminated the responsibility of observation amongst the responders.<sup>272</sup> This chapter does not seek to analyze these *relaciones* in depth, but instead seeks to understand the impulse behind the *relaciones*.

Every entry in a *Relación* includes the same basic information like, "who was the discoverer and conqueror" but the entries also analyze the region's local cultural traditions and

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<sup>271</sup>Carrera, 42; and <https://www.lib.utexas.edu/benson/rg/> (accessed April 24, 2016).

<sup>272</sup>Portuondo, 211-2.

history. For example, the *Relación* of Epazoyuca said that the village's name, which meant 'place where there is a lot of *epazotes* (Mexican tea),' was given to the village by the gods Cihuatecolotl and Colhua, along with Colhua's sister. *Epazotes*, according to the *Relación*, was a "quality herb like yerbabuena."<sup>273</sup> This small section demonstrated the dual purposes of Spanish information gathering, simultaneously telling the story of Epazoyuca's founding and expanding Spanish knowledge about New World medicinal herbs. In the *Relación* de Coatepec, the document delved into a lengthy discussion of the village's political history:

Moctezuma the, second lord of Mexico, and Nezhualcoyotl, overlord and master of Tezcucó, were the uncles of [Nonoaltizin], they named two captains, one, main and, another, of medium rank, who were natives of this town, so that they could run the administration and government of the province and its natives until [Nonoaltizin] was old enough to rule.<sup>274</sup>

Spanish officials, spurred by the reformed Council of the Indies, collected mountains of texts dedicated to recounting the histories of New World territories. The reasons for this, as this paper has already demonstrated, lay in the Spanish belief that acquiring historical knowledge would make the task of governing the Indies run smoother. This idea was spelled out further in 1571's "Ordenanzas Reales al Consejo de Indias," specifically in ordinance 12 which stated: "And thus we send ...we provide and order the laws and general provisions, so that the government of the provinces can be firstly very informed and certified..."<sup>275</sup> Sticking close to Ovando's original vision of a reformed and knowledgeable administrative structure in the New World, the

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<sup>273</sup>Yerbabuena is a rambling, aromatic herb found on the West Coast of North America. See <http://plants.usda.gov/java/profile?symbol=CLDO2>. Reference is in René Acuña, *Relaciones geográficas del siglo XVI: México, tomo primero* (México: Universidad Nacional Autónoma de México, Instituto de Investigaciones Antropológicas, 1986), 84.

<sup>274</sup>"Moteczuma el viejo, segundo señor de México, y Nezhualcoyotl, cacique y señor de Tezcucó, que era tío deste mozo, nombraron dos capitanes, uno, principal y, otro, de mediano estado, naturales deste pueblo, para que entendiesen en la administración y gobierno desta provincia y naturales della, hasta que el dicho mozo tuviese edad perfecta." In *ibid.*, 143.

<sup>275</sup>"Que para hacer leyes preceda entera noticia de lo ordenado...y así mandamos...proveer y ordenar las leyes y provisiones generales, para que el gobierno de ellas sea estando primero muy informados y certificados..." In "Ordenanzas Reales al Consejo de Indias," Ley XII, tit. II, L. II. In Velasco, viii.

*Relaciones* temporalized the region and its peoples.

Like Velasco's *Descripción Universal de las Indias*, the *Relaciones* focused extensively on geography and topography. On the surface, the *Relaciones* organized information on simplistic scales: it sought to discover if a land was "plain or rough, flat or mountainous, of many or few rivers or sources, and abundant or lacking in water, fertile or lacking of pastures, abundant or sterile of fruits and of maintenances."<sup>276</sup> As this chapter demonstrated in its analysis of "temperament," Spanish authorities had a tendency to categorize information into simple binaries that reflected Galenic medical tradition. In this regard, maps may have been a more valuable instrument for accurate geographical representation. But for bureaucratic and knowledge-gathering purposes, the *Relaciones* allowed Peninsular authorities to imagine vast swathes of American territories with relative ease. The binaries continually appear throughout the *Relaciones*, especially when climatological conditions are considered. Again, "temperament" and "quality" were the leading descriptors for a province, along with inquiries into whether a province was "very cold or hot, or humid or dry, of many water or few...and whether the winds that blew through a province were violent and from where do they blow, and in what times of the year."<sup>277</sup> This information was important for practical reasons of settlements and agriculture. In addition, as Velasco demonstrated in the *Descripción Universal de Las Indias*, environmental conditions could tell one much about the "character" of a region and its inhabitants.

Looking at the *Descripción Universal de las Indias* and the *Relaciones* in conjunction, several ideas emerge. The concept of "temperament" appeared in both and it implied a link

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<sup>276</sup>“quién fue el descubridor y conquistador...” “el (nombre del pueblo) de *Epazoyuca* quiere decir ‘donde hay muchos epazotes,’ que es yerba cálida como yerbabuena.” “...si es tierra llana o áspera, rasa o montuosa, de muchos o pocos ríos o fuentes, y abundosa o falta de aguas, fértil o falta de pastos, abundosa o estéril de frutos y de mantenimientos.” In *ibid.*, 19 and 84.

<sup>277</sup>“Temperamento y calidad de la dicha provincia...si es muy fría o caliente, o húmeda o seca, de muchas aguas o pocas...y los vientos que corren en ella qué tan violentos y de qué parte son, y en qué tiempos del año.” In *ibid.*, 18.

between climatic conditions and the physical health of a province's inhabitants. This made the holistic approach of these works all the more important. These texts expended great energy to note every environmental force at play in a province, from ocean currents to precipitation patterns to animal life. This geographic analysis was paired with historical constructions that detailed events from the Spanish point of view while simultaneously piecing together indigenous histories. Together, history and geography were the mediums through which knowledge about the New World filtered into the Old World. Throughout these texts, the reader senses the desire on the part of these writers to reconcile the Old World with what was coming in from the Americas. This chapter was not an effort to gauge actual reforms or concrete political action that resulted from the cosmographical activities of Philip II's advisors. Instead, Spain's cosmographers illustrated how complex the encounter between Old World and New truly was. This chapter has demonstrated how their holistic approach to landscape and history reflected the organizing tendencies of the sixteenth-century Spanish empire. The first generation of Spanish conquerors, governors, and cosmographers believed the New World possessed unlimited wealth that was there for the taking. The efforts of later cosmographers under Philip II represent a shift toward correctly gauging infinite resources and bringing those resources under proper management.

### Conclusion

This chapter's analysis of the *Relaciones* and Velasco's efforts in New Spain adds another element to the function of written texts in an imperial context. The problem with which Philip and his advisors wrestled was the transformation of the exotic and distant New World into something which could be ruled. In addition, Spain wanted to know which resources were

available and how best to extract them. This chapter calls into question the dichotomy which dominates discussions of early modern Spain's pursuit of knowledge in the New World. The line separating knowledge for its own sake and utilitarian, exploitative knowledge was hardly existent in the case of Spanish geographic texts in the sixteenth century. Cortés, cosmographers, Philip II, and the Council of the Indies—personified by Ovando and Velasco—attempted to solve the puzzle that was the New World by properly evaluating its wealth and presenting that information in an organized, useful manner.

This put royal observers in the New World—the authors of these various treatises and *Relaciones*—in a unique position of influence. These writers had power of sorts. They acted as arbiters between reality on the ground in the New World and royal policy in Spain. The vision of the New World inspired by their texts actively informed debate within the halls of power in Madrid. Thus, the New World texts had power on multiple levels. They provided a link between the Old World and the New, allowing the king in distant Spain to affect real change in the Americas. Simultaneously, and perhaps more interestingly, the actual act of compiling these texts was in itself an imperial act. Now a territory in Mexico could be viewed under the same bureaucratic lens as one on the Peninsula. These texts were, in effect, claiming empire through words. There may have been a strict, utilitarian aspect to these writings, but this chapter has demonstrated that there was something else at work. This was how early modern Spaniards leaders, and one could argue the Habsburg monarchy at large, made sense of their world. Philip II, the so-called “paper king,” commissioned the *Geografía y Descripción Universal de las Indias* and the *Relaciones Geográficas* in response to structural inefficiencies within the Spanish imperial system.<sup>278</sup> But the king also stood atop a vast network of patronage in the arts, botany, and literature that stretched across Europe and the Atlantic. Thus, the pursuit of knowledge for

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<sup>278</sup>Kamen, 214.

its own sake was equally powerful in determining the king's policies.

After Velasco's departure in 1588, the post of cosmographer-chronicler was split into separate offices for cosmographer and chronicler. In cosmography, the emphasis would shift from eyewitness accounts toward "mathematical cartography, astronomical navigation, hydrography, and geodesy." The office of chronicler would continue with the more textual responsibilities of geography, ethnography, and natural history. The split of the cosmographer-chronicler office reflected sixteenth-century Spanish cosmography's evolution into a more utilitarian, institutionalized set of practices.<sup>279</sup>

The story of the evolution of Spain's geohistorical writing is important for several reasons. The discovery and conquest of the New World shook existing Spanish views of the world. These texts showed not only the initial shock on the part of Spanish thinkers, but also their piecing together a cosmological framework to match their experiences. These texts emerged in a period of economic turmoil for the empire, so their findings had importance beyond the intellectual pursuits of the Crown. The Crown wanted to reshape colonial administration using this knowledge. And so Philip II tackled the problem of the New World in the same way he approached most problems: using his royal councils to gain a better understanding of his dominions. The New World treatise and *Relación* were the chosen forms of media by which Philip and his advisors hoped to render the New World knowable. This project has questioned the arbitrary division between Latin American and Peninsular histories. Also, it has continued the task of introducing environmental history and its methodologies into the history of early modern Spain. The marriage of these three distinct historical subfields classifies this chapter as simultaneously Spanish history and imperial history. The idea of empire was irreconcilable from sixteenth-century Spanish conservation and classification. Within environmental history, there

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<sup>279</sup>Portuondo, 257 and 300.

exists a strong tradition of looking at human conceptions of nature and using those to describe the actions of a society. By examining the ways in which early modern Spaniards looked upon nature, we have discovered how they imagined their world, what they perceived as problematic about it, and how they intended to bring order to it. As the sixteenth century approached its end, the Spanish empire began to decline. As we will see, Spanish intellectuals perceived this decline and sought to correct it somehow. To do so, they once again contemplated the relationship between humanity and Creation, as well as the place of Spain in history. Conservation, and the tension between resource scarcity and abundance, once again took center stage.



## CHAPTER FIVE

**Curse of Empire: Early Modern Spanish Debates on Prosperity, Abundance, and Decline***Introduction*

In 1619, the *arbitrista* Lope de Deça penned his treatise on agriculture, *Gobierno politico de agricultura*. Lope de Deça wrote on the “dignity, utility and necessity of agriculture” in the opening pages of his treatise:

The ancient, undeveloped land (*tierra*) of agriculture, from where ancient nobility was derived, is where God placed the first man after his fall to cultivate the land in order to sustain himself.<sup>280</sup>

The Dominican, Francisco de León, remarked that the idleness of the Spanish people had made them “seem more like demons” while Deça chastised those who had “left agricultural labor to study law at the university.”<sup>281</sup> The *arbitristas*, or reformers, were early seventeenth-century Spanish intellectuals who offered advice to the king on the economic crises facing the Spanish empire at the time. As the above excerpt demonstrates, *la tierra*—the land—was a crucial actor in reformer literature. Starting in the mid-sixteenth century and continuing through the seventeenth century, Spain encountered a series of economic and political crises. Military defeats in the Low Countries and against England, rampant inflation, and repeated bouts of bubonic plague in the late sixteenth century, among other factors, had the leading moralists and economic thinkers of the time searching for answers.<sup>282</sup> Most importantly, they had to reevaluate some basic assumptions about the inherent benefits of possessing an empire. The Spanish soul-searching over whether empire was a blessing or a curse comes through in the treatises of many

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<sup>280</sup>Lope de Deça, *Gobierno politico de Agricultura* (1618), f. 1.

<sup>281</sup>Elizabeth A. Leffeldt, “Ideal Men: Masculinity and Decline in Seventeenth-Century Spain,” *Renaissance Quarterly* 61, no. 2 (Summer 2008): 463-4.

<sup>282</sup>Leffeldt, 465.

Spanish *arbitristas* in the late sixteenth and early seventeenth century. Written during a period when inflation, expensive and disastrous foreign wars, and domestic economic stagnation were crippling Spain, these economic and agricultural treatises attempted to locate the sources of Spain's problems as well as to provide solutions. After the defeat of the Spanish Armada in 1588, Philip II had lost 3.75 million *maravedís* alone to that disastrous enterprise.<sup>283</sup> The plague of 1596, along with rampant financial speculation, further exasperated the economic problems facing the kingdom.<sup>284</sup> These reformers rejected the starry-eyed optimism of earlier explorers and conquistadors who viewed the wealth of the Indies as both beneficial and limitless. The authors weighed the economic and spiritual consequences of an overabundance of and overreliance on precious metals, juxtaposing domestic development, field labor, and agriculture with precious metals as alternative and healthier forms of wealth.

During the Age of Mercantilism, Spanish economic thought reached its zenith in the School of Salamanca. These jurists and theologians concerned themselves with, among other things, the nature of private property, the welfare of the poor, the quandary of the "just price," the dangers of usury, and foreign exchange. They believed that the value of a good was subjective and utilitarian. This belief was reflected and hinted at in their emphasis on social justice; it was not just impersonal market forces that dictated the value of goods, but also the collective moral prerogatives of a society that determined who bought what. Before the Age of Mercantilism, economic thought existed "only as a by-product of legal, theological and philosophical inquiry." Within the universities arose "schools" of thought, with "Doctors" who were proficient in multiple subjects. Whereas medieval scholastic thought was concerned with

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<sup>283</sup>Gabriel Tortella and Francisco Comín, "Fiscal and Monetary Institutions in Spain (1600-1900)," in Michael D. Bordo and Roberto Cortés Conde, *Transferring Wealth and Power from the Old to the New World: Monetary and Fiscal Institutions in the 17th through the 19th Century* (Cambridge, UK: Cambridge University Press, 2001), 141-2.

<sup>284</sup>Sánchez, "Wealth in Golden Age Literature," 57 and 59.

the opaque and the metaphysical, the sixteenth-century Spanish intellectuals sought holistic solutions to broader societal issues.

As was the case with early modern Spanish geographers, the School of Salamanca believed that the best knowledge came from Antiquity. Salamanca borrowed heavily from Aristotle's *Politics*, particularly his analyses of wealth and property. Aristotle argued that money had no value on its own and was strictly utilitarian, serving only the purpose of exchange. The exchange of money eventually replaced the barter system to facilitate trade over long distances. With the advent of money, what had been a physical exchange of goods between two people, physically present at the spot of the trade, became an abstract exchange. The problem then, according to Aristotle, emerged when people began to seek large amounts money for its own sake. If a man did not diversify his wealth by acquiring property elsewhere, he could find himself quickly impoverished since the value of money was ever-shifting. A devotion to money-making endangered oneself, as well as the community. Since money had no natural use, it could never serve natural needs on its own.<sup>285</sup>

For medieval Europeans, determining value was important to their daily lives. Lawyers needed to know value in order to divide inheritances and judges needed to assess compensation correctly. St. Thomas Aquinas, like Aristotle, provided the basis of the School of Salamanca's theory of value, particularly in terms of understanding of supply and demand. Aquinas argued that goods were never valued according to their worth in the scale of nature. If goods were valued in such a way, a living creature like a mouse would be worth more than inanimate gold and silver. Instead, people assigned value to objects according to their wants and needs. This

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<sup>285</sup>Marjorie Grice-Hutchinson, *Early Economic Thought in Spain, 1177-1740* (London: G. Allen & Unwin, 1978), 81.

could be applied to society at large; if a city was starving, the price of wheat will rise according to the demand.<sup>286</sup>

The economic crisis of the mid-sixteenth century began with rising prices and Spain's inability to find foreign markets for its goods. The Crown opened up its markets to foreigners in 1552, only to then close those markets in 1558. This back-and-forth policy reflected the Crown's desire to make a profit from their American industry while also protecting their supply of precious metals at all costs. Spain's domestic industry suffered as well, particularly its agricultural output.<sup>287</sup> The decline of Spain's domestic economic fortunes in the late sixteenth century, and the mistrust of foreigners it fostered, can be discussed in the terms of a burgeoning Spanish national character.

Some historians have argued that early modern Spanish society was inherently distrustful of the merchant class and that this distrust was a key part of the Spanish national character. In particular, Bartolomé Bennassar argues that, unlike Christians in most other European kingdoms, Christian Spaniards lived in daily contact with Jews and *Moriscos*, Muslims who had converted to Christianity. Jews and *Moriscos* often lived in segregated enclaves, further exacerbating distrust among Christians and inhibiting cultural exchange. Although Bennassar's characterization of the Spanish national character has been largely abandoned in the historiography, this mistrust on the part of Spanish Christians was an important force behind the Spanish polemics on the role of merchants and merchant behavior in the *república*.

Christian Spaniards associated the practices of usury and money-lending, or as Bennassar says, the "mysteries of trade and money" with Jews. They were prohibited from taking part in government and mostly made their living in the marketplace. But the prohibition of taking part in

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<sup>286</sup>Ibid., 82-3.

<sup>287</sup>Ibid., 92.

the government did not apply toward *conversos*, or converted Jews, who could and did hold positions of power. This legal reality led to conflict between Old Christians and *conversos* during the sixteenth century, conflict that was further exacerbated by Spain embracing the Counter-Reformation. As the Church became an arm of the Spanish state and vice-versa, according to Bennassar, the political and economic language of Spain's leading intellectuals became ever nationalistic and protectionist.<sup>288</sup> Spaniards were eager to place the blame for the *república's* woes on the merchant-class and its Jewish constituency. While there were elements of truth to Bennassar's assessment of the "Spanish Character," this chapter's analysis of merchant polemics and Spanish attitudes toward American wealth shows that the Spanish had a more nuanced understanding of mercantile wealth. Economists such as Mercado made a distinction between good forms of wealth and bad ones and argued that commerce could improve the *república* if it was done in the right way. Commerce was not inherently a bad form of wealth, but could become bad if it did not help domestic infrastructure or adhere to a sense of Christian moral economy.

Saying that early modern Spanish society was entirely distrustful of commerce does not tell the whole story. Instead, Spaniards imagined the marketplace as another arena where humanity, in accordance with Ancient philosophical knowledge and Christian teachings, could improve or worsen its own condition on Earth. As Henry Kamen argues, early modern Spanish economists and theologians located the source of Spain's decline not just in the activities of greedy merchants and foreigners, but in the lure of American opportunity. The chance to find wealth in American mines and the prospect of finding employment decreased Spain's manpower

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<sup>288</sup>Bartolomé Bennassar, *The Spanish Character: Attitudes and Mentalities from the Sixteenth to the Nineteenth Century* (Berkeley: University of California Press, 1979), 73, 82-3, 124, and 224-5.

and further harmed domestic industry.<sup>289</sup> Kamen's argument problematizes Bennassar's assessment of the so-called Spanish national character by contextualizing Spanish economic thought less in nationalist, ethnic terms and more in the perception of America itself as a potentially harmful entity.

In addition to employing nationalistic and protectionist language, Spanish reformers used a number of rhetorical strategies to cast doubt on the supposed benefits of precious metals. Figures like Tomás de Mercado, who believed that the mysterious and seemingly uncontrollable realm of market economics lay at the root of Spain's economic problems, appealed to religious language to condemn the marketplace as devoid of morality. Only by improving the moral character of Spain's merchants, he argued, could inflation and price fluctuation be controlled. Furthermore, Salamancan theorists argued that the Spanish reliance on precious metals was facilitating the exportation of the country's wealth to Spain's enemies. By returning to the ideals of labor and agriculture, they reasoned, Spain could wean itself from precious metals, avoid idleness, and fortify itself against its enemies. The reformer polemics, though spread across over seventy years, shared an obsession with beginnings and reverence for ancient knowledge. Together, they demonstrate the variety of responses Spanish intellectuals had to the question of Spanish economic decline. But most important of all, these polemics were arguing that farmers and the nobility were the rightful possessors of wealth, while also articulating exactly what wealth was. During the mid-sixteenth century, the conversation revolved around marketplace behavior, a lack of domestic economic development, and the supposed laziness and greed of the

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<sup>289</sup>Henry Kamen, *Imagining Spain: Historical Myth and National Identity* (New Haven: Yale University Press, 2008), 192-3.

merchant class.<sup>290</sup> By the turn of the century, *arbitristas* arrived on the scene, calling for a return to agricultural ideals.

These treatises, while seemingly devoid of environmental language in many cases, actually help to reveal some of the underlying assumptions early modern Spaniards had about the environment. Several key words—paradise, abundance, scarcity, land, agriculture—dominated reformer literature. These words and ideas formed the scaffolding of reformer environmental thought, ideals with which Spanish society would have to contend if it wanted a better future. The central idea around which *arbitrista* literature revolved was that Spain should not depend on New World gold and silver because it had an abundance of domestic natural resources. In order to demonstrate the feasibility of this idea, *arbitristas* argued that, in the past, Spain had been an earthly paradise with seemingly infinite resources and natural beauty. In order to restore Spain to this previous state, they reasoned, the principles of agriculture needed to be reinforced. Through labor, early modern Spaniards could fend off the laziness and greed that engendered their overreliance on the precious metals that were seemingly ruining the country. It was within this context that Spanish economists and *arbitristas* upheld farmers as being morally superior to the merchant class. The basis of this moral superiority, they surmised, was the farmers' agricultural expertise and their intimate relationship with nature. Farmers had a spatial and psychic proximity with the fruits of the land that merchants did not, so they were better suited to be the foundation of the nation's wealth.

The Spanish debates over economic decline, work, and agriculture reflected wider trends in early modern European thought. Clarence Glacken posits that one of the fundamental questions guiding European thought from Antiquity to the eighteenth century was whether or not

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<sup>290</sup>I chose the term “merchant class” and not “urban élite” because I am still struggling with the terminology for early modern social divisions. Even the term “class” may be anachronistic, but it comes closest to describing the group at play.

the earth, “which is obviously a fit environment for man and other organic life,” was a purposefully-made creation.<sup>291</sup> More specifically, much of Christian thought during the medieval and early modern period was concerned with defining the connections between humanity and the earth.<sup>292</sup> For the purposes of this chapter, the most important intellectual thread Glacken notes was the idea that humanity was “set apart from all other forms of life and even inanimate nature.” The fact that medieval and early modern thinkers imagined the relationship in this way was reflected in their conservation policies, as well as in their attempts to protect nature. At the heart of this relationship, as Glacken notes, were the medieval and early modern European understandings of original sin and the fall of humanity from paradise. Christian stewardship was closely linked with the responsibility that “a temporary sojourner on earth has toward posterity.”<sup>293</sup> In the post-fall world, “man is a caretaker of nature” and nature is “man’s garden.” This logic provided the foundation for much of early modern Spanish economic and religious thought in regards to fixing socio-economic crises. The vocabulary used throughout Christian literature regarding the fall from Eden, agriculture, and paradise was “that of a peasant farmer” and so it was in early modern Spain.<sup>294</sup> This chapter supports Glacken’s claims while adding that Spanish thought was peculiar in one important way: Spanish intellectuals and reformers were appropriating the Edenic myth to argue for a specific social order, where the merchant class would be reprimanded and those who practiced agriculture—the landed nobility in particular—would be allowed to revitalize Spain and refashion it in their image. As we will see later, the reformers would deploy several usable pasts to demonstrate their own effective stewardship in the past.

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<sup>291</sup>Clarence Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century* (Berkeley: University of California Press, 1966), vii and viii.

<sup>292</sup>*Ibid.*, 151.

<sup>293</sup>*Ibid.*, 152.

<sup>294</sup>*Ibid.*, 153.



In addition to revealing romantic notions of the countryside held by early modern Spanish thinkers, the debates on the effect of precious metals revealed another facet of early modern Spanish thought: the landscape only had as much value as human labor could extract from it. The environment had no intrinsic worth of its own. While municipal and state authorities passed conservation legislation to protect what they believed to be limited forest resources, the *arbitrista* literature implied that the wealth of nature could be infinite with the aid of labor. These were contradictory notions and they reflected the evolution in economic thought that occurred over the course of the sixteenth century. The Spanish debates about gold and silver problematize management in an early modern context. If nature is able to provide infinite wealth, as the *arbitristas* believed, then supply and demand become meaningless and management becomes a non-issue.

The acquisition of material wealth, in the form of gold and silver, was perhaps the biggest motivation behind Spanish expansion in the Americas. Early on, the desire for precious metals filled the imaginations of explorers and conquerors. As conquistadors discovered new areas, they gave these territories names which reflected their desire to find gold there (Castilla del oro, Costa Rica).<sup>295</sup> But as Pierre Vilar notes, these conquerors did not think solely in materialistic terms. They continually couched their pursuits in religious terms, essentially making no distinction between material and spiritual gains. Early modern thought, though it was ripe with scientific discovery and technological advancement, did not possess the dichotomy of the temporal and spiritual, nor did it distinguish “between firm scientific observation and fantasy.” Sifting through Christopher Columbus’ diary, the text indicates a near-obsession with finding gold, but Vilar argues that scholars would be mistaken to ask “whether this indicates unadulterated greed.” Columbus’ reasoning was that Indians, being good people, would be open to becoming

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<sup>295</sup>Pierre Vilar, *A History of Gold and Money, 1450-1920* (London: NLB, 1976), 106-7.

Christians. In turn, this would facilitate the extraction of precious metals and the establishment of markets in the region.

In addition to economic decline in Spain itself, the Spanish obsession with precious metals had a devastating impact on indigenous society. Just as abundance would come to shape reformer arguments, it also affected the imaginations of the conquerors. They believed there was a seemingly endless amount of precious metals to be found in the New World. Besides the obvious disruption to indigenous living patterns and the wholesale pillaging of communities, the Spanish mining complex demanded extensive indigenous labor and exacted a heavy toll on the surrounding environment. For example, when Spanish explorers arrived at the Central American isthmus, they quickly stripped it of its precious metals. The region's indigenous population, due to a combination of war and infectious disease, declined dramatically. Population decline in the isthmus created a labor shortage when the time came to connect the Atlantic with the mining networks in Peru.

The Spanish now needed the isthmus to serve as the link between the Peruvian silver mines and the Atlantic trade network. This forced the Spanish to repopulate the region, but the damage had been done. The overexploitation of native labor on the Central American isthmus would prove emblematic in terms of Spain's economic crisis. The belief that the New World would continuously produce more precious metals led to the destruction of profit "by means of profit itself." The destructive effects of the Andean mining complex were not lost on the region's indigenous people. Indigenous peoples in present-day Bolivia believed that a member of the Incan nobility had cursed all gold and silver so that "Spaniards will be forced to live by their work." The Bolivian folk legend featured a figure called Hahuari who was identified as a devil (or *Tio*) of the tin mines. *Tio* sought to lure common folk away from farming and into the mines.

*Tio* symbolized the Spanish overlords and the cruel economic bondage forced upon Andean indigenous peoples. The miners left behind peasant life to mine and, barring the intervention of a prophesied Incan princess, would be destroyed by the mines. Even the Spaniards themselves sometimes referred to Potosí as a “mouth to hell” and pondered the human costs of mining as it “spewed forth a class of homeless and masterless people” who would add to colonial discontent. Pre-conquest mining in the Caribbean and the Andes served small-scale economic interests and was self-sufficient, but post-conquest mining helped to fuel the burgeoning mercantile-capitalist system.<sup>296</sup> It was precisely this sort of obsession with precious metals that the reformers and thinkers of the later sixteenth century would deride as deleterious to the republic.

Before the economic decline of the later sixteenth-century, Spaniards viewed the overabundance of material wealth as a fundamentally good thing. This chapter’s organization will follow this change in perception of New World resources and the rhetorical practices that changed along with it. During the mid-sixteenth century, Spanish theologians and economists confronted the burgeoning urban merchant class and laid much of the blame for the empire’s economic problems at their feet. A change in merchant behavior was needed, so they said, and they offered the apostles as moral examples. Thinkers like Tomás de Mercado employed agro-pastoral imagery, giving their advice a decidedly rural character. Agricultural labor instilled good morals and only by mimicking that behavior within Spain’s commercial centers could Spain’s economy be recovered. This emphasis on labor and agriculture remained constant throughout the sixteenth and seventeenth centuries, but where it was implicit in the writings of thinkers like Mercado and Luis Ortiz, agriculture became an explicit factor in the reformer literature of the seventeenth century. Not only did agro-pastoralism provide the foundations for moral behavior

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<sup>296</sup>Michael T. Taussig, *The Devil and Commodity Fetishism in South America* (North Carolina: University of North Carolina, 1980), 152-3, 199, and 202-3.

in these later writings, but agriculture was offered as a source of wealth far superior to a dependence on gold and silver. At the heart of all of these debates were questions over the proper possessors of wealth and where said wealth had its origins. As previous chapters have suggested, the expansion of the Spanish empire—and many parts of early modern Spanish identity—were bound up with urban living. The founding of cities was a precursory justification of Spanish authority in newly-conquered territories, both in the era of the Reconquista and in the Americas, and the control of resources was increasingly falling under the control of municipalities. This created an interesting tension in the character of Spanish imperialism: the old landed nobility, often so opposed to urban élites and their new money, wanted an empire just as badly as those élites. But as the history of the expansion of the empire shows, that expansion always had an urban component. This left the old nobility in a precarious position: how could the empire continue to expand and manipulate resources in an effective way while maintaining a rural, agro-pastoral ethos?

*Solving the Riddle of Prices: Moral Prescriptions for Economic Decline*

Francisco J. Sánchez characterizes the sixteenth-century Spanish economy as essentially being comprised of a “mercantile structure of values, the means of realizing the transition from traditional morality into a practical activity toward economic gains.” Within this economic environment, Sánchez argues, an individual’s motivation for action was “clearly the attainment of economic benefits at the expense of other individuals, even while the self reflects upon the moral contradictions of the social world.”<sup>297</sup> Sánchez’s observations encapsulate perfectly the

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<sup>297</sup>Francisco J. Sánchez, “A Discourse on Wealth in Golden Age Literature,” in Tom Lewis and Francisco J. Sánchez, *Culture and the State in Spain, 1550-1850* (New York: Garland, 1999), 55-6.

multiple problems facing early modern political economists and reformers.<sup>298</sup> The attainment of empire had ushered in an era where macro-scale market forces could have real economic and social impacts on a micro-scale. In order to stave off the socio-economic devastation of local communities, Spanish reformers had to offer solutions that reconciled moral marketplace behavior with the incoming wealth of the Indies.

The reformers faced a tall task in that the arrival of New World gold and silver had engendered a self-defeating cycle. Conquistadors found great wealth in the New World and expected to find more, meaning that merchants could place egregious markups on commodities on the basis that returnees from the New World could afford the higher price. This had a disastrous impact on local economies where the mark-up of commodities could be passed on to every consumer, not just departing conquistadors. It was this violent collision of imperial idealism and economic reality that spurred Tomás de Mercado's (1525-1575) moral reasoning. Others shared Mercado's sentiment about the deleterious economic and social effects of New World gold and silver. Just as conquerors justified their New World gains in both spiritual and material terms, the intermingling of spiritual and material reasoning extended well into and past the sixteenth century.<sup>299</sup> This was important because, as Spain's economic fortunes declined during the latter half of the sixteenth century, Spanish reformers like Mercado attempted to diagnose Spain's decline in both economic and spiritual terms, prescribing moral solutions to economic problems. Abundance, as an environmental phenomenon and as a moral dilemma, took center stage in these debates.

In 1569, Mercado offered his own response to Spain's economic problems. Along with Jean Bodin and Martin de Azpilcueta, Mercado approached several basic questions about market

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<sup>298</sup>The term "political economist" is as close as I can come to thinking of a unifying title for the *arbitristas*, reformers, theologian-economists, and theologians of the period. Is this too anachronistic?

<sup>299</sup>Vilar, *Gold and Money*, 63-4.

economics: 1) Why do prices fluctuate and what causes these fluctuations and 2) Why does currency not have a universal, unchanging value?<sup>300</sup> “The value of money is a specific social value.” Since it is socially determined, the question then becomes why its value changes at all.<sup>301</sup>

Vilar neatly describes the conclusion at which Mercado and other reformers arrived: precious metals were a vastly abundant resource in the Indies, one that was not valued as much by indigenous peoples as it was by Europeans. Through barter or outright conquest and looting, the Spanish could acquire precious metals easily and in massive quantities. It was left to merchants in Seville, where Mercado was writing, to provide commodities to departing conquistadors. These merchants, knowing that those bound for the Indies would pay outrageous sums because the conquerors expected to return rich, marked up prices on commodities. This increased the price of commodities across the board for conquistadors and citizens alike. Mercado, along with most early modern economic theorists, wrote with the belief that a so-called “just price” was not synonymous with a morally just price, but instead that a just price would match the “common price” of the market. By mid-century, theologians had put forward enough economic theory that a confessor’s handbook “became a veritable economics textbook.”<sup>302</sup>

The transformation of Seville, from a remote Andalusian municipality to the economic center of the Spanish empire and nexus of European trade in the New World, did not lead to unending riches for Spaniards, nor did it create a sense of financial security for the burgeoning empire.<sup>303</sup> On the contrary, Mercado believed that it helped lead to the exportation of national wealth to Spain’s rivals and that it led to a national malaise. As mentioned earlier, Mercado and other reformers believed that the vicissitudes of market economics were at the heart of the

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<sup>300</sup>Ibid., 163.

<sup>301</sup>Sánchez, “Wealth in Golden Age Literature, 65-6.

<sup>302</sup>Vilar, *Gold and Money*, 57-8.

<sup>303</sup>Ibid., 79-80 and 84.

problem of precious metals. Mercado posited that one could explain differentiations in prices spatially: the closer one is to the source of wealth, the less he values it. Thus, conquistadors valued precious metals less because they controlled the mines, riverbeds, and indigenous treasuries that produced them. Spanish and foreign merchants alike could count on the reckless financial spending of conquistadors, so they increased prices. But this spatial relationship, according to Mercado, extended beyond the Indies and Seville. Seville's relationship with the rest of Spain functioned in a similar way, as did Spain's relationship with the rest of Europe.<sup>304</sup>

Since Mercado thought of rising prices as being symptomatic of both economic and moral problems, he framed his argument with the style of a prescriptive homely. Mercado opens his treatise on economics, *Suma de tratos y contratos*, by likening the vocation of being a merchant to that of the Biblical Apostles and the classical philosophers. In doing so, he touches upon critical issues of authority, knowledge, the moral implications of wealth and its uses, and what constitutes the common good. Mercado was both a Dominican theologian and a leading economist of the late sixteenth century, making his use of religious rhetoric in economic theory less surprising.

Mercado reasons that all forms of knowledge, be it mercantile know-how or the ability to save souls, have divine origins and that only a select few can adequately pass on knowledge. Mercado treats knowledge as a divine gift, saying that "divine mercy imparted some free grace" to certain messengers who were to use this knowledge "for the utility of the people." Mercado continues, arguing that one could not realize the full potential of these "gifts of knowledge and understanding" unless he used them to serve the republic and to teach others.<sup>305</sup> Mercado continually emphasizes utility as a legitimizing factor in economic enterprise, pointing to God's

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<sup>304</sup>Ibid., 161-2 and 164.

<sup>305</sup>Tomás de Mercado, *Summa de tratos y contratos* (<http://www.hacer.org/pdf/Tratos.pdf>), 19.

pronouncement to the prophet Isaiah: “I am your God, which taught you useful and profitable things.”<sup>306</sup>

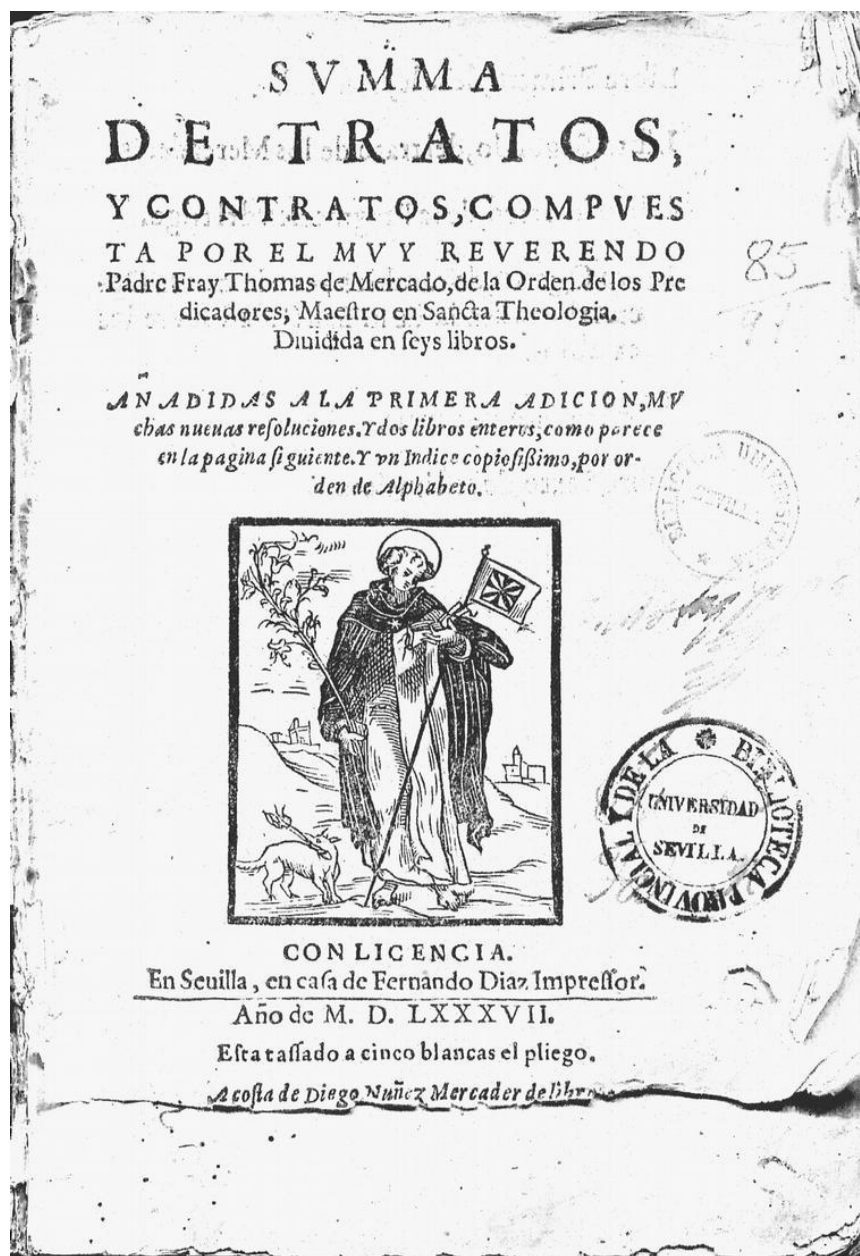


Figure 8: Title page of Mercado's *Summa de tratos y contratos*. The figure of the apostle/shepherd was central to Mercado's arguments, as indicated by the illustration found in the treatise's opening pages. Mercado employed the imagery of husbandry in order to support his belief that agro-pastoralists provided the best moral example and work ethic for early modern Spaniards.

<sup>306</sup>Ibid., 20.



Using the Apostles as models, Mercado posits that early modern Spanish merchants could imbue their work with the same righteousness and utility. Indirectly placing himself in the role of apostle, Mercado says that his task is to teach merchants how to pursue their vocation within the boundaries of the law and within the spirit of fairness. The benefits of good business had both a spiritual and national dimension. First, it would keep people happy by protecting “equity and justice” in contracts. Second, Mercado argues that this is crucial because “more negotiations are executed today between Spaniards than in any other nation.” Thus, Mercado believed that the seeds of Spain’s economic renewal could be found by changing their behavior in the marketplace. As Vilar notes, the Spanish thought about economics and the effect of precious metals more than anyone else during the sixteenth century.<sup>307</sup> This made them ideally suited to alleviate economic decline. The most powerful arguments for how Spaniards could improve Spain’s fortunes were centered around the ability of Spaniards to generate wealth from agriculture.

### *Environmental Imaginaries: Agriculture as a Solution*

As the imperial crises of the late sixteenth and early seventeenth century stacked one upon another, some reformers believed that the source of the problem lay in the supposed laziness of Spain’s citizens and in the abandonment of agricultural labor. These reformers were responding to, among other things, a demographic and agricultural decline which began in the late sixteenth century and early seventeenth century. In the city of Segovia, the population rose about 20 percent in the period 1530 to 1600 while in Toledo, the population rose 40 percent. But at the end of the sixteenth century, Segovia’s population stagnated while Toledo’s actually declined. In addition, wheat production fell in both places, most likely due to an “exhaustion of

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<sup>307</sup>Vilar, *Gold and Money*, 157.

cultivable land.”<sup>308</sup> While Michael Weisser describes the crises of the late sixteenth and early seventeenth century in terms of the “weight of fiscal exactions and their inhibiting effect on economic development,” Elizabeth Leffeldt approaches the problems facing the Spanish empire in terms of a crisis of masculinity.<sup>309</sup>

Leffeldt argues that the seventeenth-century paradigm of masculinity failed because Spaniards could not imagine new modes of masculinity and, instead, were stuck on medieval and sixteenth-century exemplars.<sup>310</sup> One such exemplar was the humble peasant, San Isidro, an “ideal male peasant who embodied the agricultural virtue that many believed would provide the key to Spain’s recovery.”<sup>311</sup> But this polemic had a fundamental problem: Spanish reformers were targeting the nobles with their rhetoric. This was not a wholly untenable approach, as the trademark values of early modern Spanish nobility were “moderation and prudent stewardship.”<sup>312</sup> The agro-pastoralist paradises described by seventeenth-century *arbitristas* required stewardship. But as Leffeldt notes, a peasant could be “urged to work the fields” while a noble’s very station in life was “defined by his rejection of manual labor.”<sup>313</sup> In the 1550s, Luis Ortiz argued that the republic had become lazy and that part of the reason for that laziness was the disconnect between prosperity gained from wealth and the lack of real labor in attaining said wealth.<sup>314</sup> By the end of the sixteenth century, Spanish reformers were still offering labor as a solution to the socio-economic crises, but now they were framing their strategies in terms of returning to agriculture. They deliberately employed the past as a “source of models and guidance as they crafted an image of noble masculinity.” These models could be used to counter

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<sup>308</sup>Michael R. Weisser, “The Agrarian Depression in Seventeenth Century Spain,” *Journal of Economic History* 42, no. 1 (March 1982): 150.

<sup>309</sup>Weisser, 153.

<sup>310</sup>Leffeldt, 466.

<sup>311</sup>*Ibid.*, 473-4.

<sup>312</sup>*Ibid.*, 468.

<sup>313</sup>*Ibid.*, 467.

<sup>314</sup>*Ibid.*, 479-80.

the “urgent sense of decline in the seventeenth century” while grounding the new moral economy historically.<sup>315</sup>

Luis Ortiz, royal councilor and Treasurer of Castile, argued in the 1550s that labor was the true source of a nation’s wealth, not precious metals. Ortiz’s position reflected his long-held belief in the defense of “protectionist measures against imports in order to favor the development of ‘internal’ commerce and industry.”<sup>316</sup> In a similar vein, writers like Fernández de Navarrate and López Bravo warned against Spaniards entering ecclesiastical careers, due to a fear of the Church growing too power in the country and in response to popular discontent with Church taxation.<sup>317</sup> Thus, Ortiz’s arguments were part of a wider discourse on labor and where people should place their efforts. He maintained that Spain had achieved its wealth in precious metals via the work of others (indigenous peoples). In turn, foreign merchants had done little work of their own and had raided Spain of its wealth, taking advantage of Spanish “courage and daring” in the Indies. Ortiz’s juxtaposition of indigenous peoples’ and Spain’s positions points to another facet of early modern Spanish thought: just as they made no distinction between the spiritual and the material, early modern Spaniards had no conception of the “dialectic of exploiter and exploited, of colonizer and colonized.” In Ortiz’s view, foreign merchants had reduced Spain to the same degrading position as the people of the Indies. His proposed remedy was to change Spaniards’ mentality about precious metals: Spain should use precious metals as capital to finance domestic industries.<sup>318</sup> This would solve many of Spain’s economic problems by cutting off foreign merchants from the Indies profits and by invigorating local industry.

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<sup>315</sup>Ibid., 469. I intend to tread carefully around this term of “moral economy” while my theoretical understanding of the term is so thin. Needless to say, this chapter is all about finding a moral economy in changing economic times while the old social order was being fundamentally challenged by new money.

<sup>316</sup>Sánchez, “Wealth in Golden Age Literature,” 59-60.

<sup>317</sup>Ibid., 63.

<sup>318</sup>Vilar, *Gold and Money*, 159 and 166.

In 1558, Ortiz submitted a *memorial* to Philip II, describing the problems besetting Spain at the time. He infused his rhetoric with environmental imagery, using a specific imaginary of Spain to support his argument that Spain could and should rely on domestic resources. He claimed that Spain was “neither toasted by the force of the sun like Africa, nor fatigued by fierce winds like in France.” Spain’s environment was the best of both worlds, combining the warm climate of Africa with France’s seasonal rains.<sup>319</sup> His description of Spain’s landscape contained similar idealistic undertones. The rivers of Spain were “neither impetuous nor unpleasant in a way that would cause damage,” but instead they were “meek and convenient for watering the fields.” In addition to being “abundant (*abundados*) with fish,” Spain’s rivers served the purposes of industry, specifically carrying gold, being used “for clothing dying and for cooling the best swords in the world.” Summarizing the ancients’ descriptions of Spain, Ortiz wrote that in ancient times, Spain “was a paradise (*paraíso*)” and provided “perpetual rest” to those passing through. The ancient authorities claimed that “all of Spain [had] good, clean air in every part” and “there [were not] any lakes that emit fog that cause infection.” Spain’s proximity to the Atlantic and Mediterranean meant that winds from the sea would disperse “whichever<sup>999</sup> terrestrial vapors that [carried] sickness.” Having an ideal environment and climate, Ortiz reasoned that Spain had an abundance of natural resources that not only “supplied all that is necessary for human life to the inhabitants of (this nation),” but also provided “more still to other pilgrim nations.” Taking stock of Spain’s “buried riches” (*riquezas encerradas*), Ortiz proclaimed that “there is not a more abundant land” than Spain.<sup>320</sup>

The idea of an inherent abundance of natural resources within the Spanish landscape is key to understanding Ortiz’s position in relation to precious metals. As Elvira Vilches explains,

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<sup>319</sup>Luis Ortiz, *Memorial del Contador Luis Ortiz a Felipe II. Valladolid, 1 de marzo de 1558. Biblioteca nacional-Ms. 6.487* (1970), 20.

<sup>320</sup>*Ibid.*, 21-2.

Ortiz was calling for a fundamental reordering of Spanish economy and society, beginning with the revitalization of domestic labor and agriculture.<sup>321</sup> The precious metals flowing in from the Indies were not harmful by nature. Instead, they could prove beneficial to the nation.

By 1600, the attitude toward precious metals had shifted: gold and silver, as a form of wealth, were viewed as being inherently deleterious to society. Martín González de Cellorigo, an economist and one of the first *arbitristas*, posited that Spain was paying the price for its overreliance on precious metals as a source of wealth. For Cellorigo, money was a “sign of wealth” but did not have any value of its own. The emergence of Spain’s Atlantic economy disrupted the medieval economic view with its “world of absolute values and social harmony.” Cristóbal de Villalón underlined this anxiety and mirrored Cellorigo’s analysis. He expressed a similar disdain for purely financial exchanges versus real transactions with physical merchandise: “in those glorious times when men did not use this dissolution, men lived richer, happier, and more at ease, consuming that which they inherited or earned by their sweat.”<sup>322</sup>

Villalón divided wealth into two orders: natural riches and artificial riches. Natural riches were those that were “ordained to supply the natural necessities, such as food to quell hunger and drink to quell thirst and clothing against the cold...all the things necessary for the preservation of the person himself.”<sup>323</sup> By comparison, artificial riches were those that had been “discovered by human industry with which to buy and to have the natural ones; such as money, because money does not have to satisfy hunger, nor does it keep out the cold, but by way of it one buys what

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<sup>321</sup>Vilches, 239-41.

<sup>322</sup>“Pues en aquellos tiempos gloriosos, quando no se usaua esta disolucion, biuian los hombres mas ricos, mas contentos, y mas descansados contiendo aquello que, o heredaron, o ganauan de su sudor.” In Cristóbal de Villalón, f. ix, page 60; in D’Emic, 25.

<sup>323</sup>“Riquezas naturales son aquellas que se ordenan para suplir las necessidades naturales, como el manjar contra la hambre, el beber contra la sed, la ropa contra el frío...todas las cosas necesarias para la conservación de la propia persona.”

satisfies hunger and keeps out the cold.”<sup>324</sup> Villalón’s rhetoric mirrors Kenneth Pomeranz’s argument that early modern Spain lost its lead in economic growth, in part, because it focused too much upon precious metals and not enough upon “real” resources like food and wood.<sup>325</sup>

This overreliance on precious metals had impoverished Spain via a neglect of local industry, inflation, and poor commerce practices. Like Ortiz, Cellorigo constructs an environmental imaginary which served as a contrast to the current state of affairs he was describing. He opened with the rather pessimistic section entitled, “As fertile and abundant as [Spain] is, it is disposed toward decline as usually happens to other republics.” Echoing Ortiz, he claimed that “Spain was always held as being a fertile and abundant province.” In addition to the recurring theme of abundance, Cellorigo described the state of Spain’s affairs in medical terms. If Spain seemed “sterile,” said Cellorigo, “it [was] because (its inhabitants) have not given a tribute appropriate to God’s gift to man.” Though Cellorigo did mention food shortages in certain instances, the “sterility” he described seemed more a case of hyperbole in terms of economic productivity. Spain was producing wealth, but it was not producing as much as it could, nor was it producing lasting wealth. The “gift” he described was the ability to do work and the “tribute” was applying one’s labor toward virtuous occupations. This becomes clear in the next statement when he claimed that if the lands of Spain “were cultivated as the law of nature teaches us, it would be enough to maintain an infinite number of people.”

Cellorigo saw examples in the immediate past of how Spain’s resources could support massive numbers of people and animals. Alluding to the end of the Reconquista in the late fifteenth century, he claimed that the King of Granada marched against King Ferdinand of

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<sup>324</sup>“Las riquezas artificiales son las que halló la industria humana para haber y comparar las naturales como son dineros, porque la moneda no mata el hombre, ni quita el frío, mas por ella se compra lo que cura el hambre y quita el frío.”

<sup>325</sup>Worster, *Shrinking the Earth*, 38.

Aragon with fifty thousand horses. By comparison, Cellorigo observed that “one cannot find as many [horses] in these times in all of Spain...and note how neglected [the lands are] in tilling and in breeding.”<sup>326</sup> Just as Ortiz described the Ancients gloating over Spain’s magnificent landscape, Cellorigo argued that the King of Granada used the sliver of land he still controlled in Andalusia to breed fifty million horses. Spain had great potential wealth, but this could only be achieved via labor. “That which is most certain,” Cellorigo argued, was that “because of the scorning of natural laws, which teach us to work, and because we have put wealth in gold and silver and have ceased to follow the right path, our republic has declined from its former state.” The paradox of having great wealth but still experiencing economic and social decay could be solved, in Cellorigo’s mind, by examining the problems inherent in having an abundance of material wealth. A realm could be “fertile in lands, abundant in riches, brilliant in arms and powerful in vassals, triumphant in victory, and justly governed, and fall from greatness as much as any other (realm).” This was because prosperity was “one of the most powerful enemies of virtue” and would cause inaction on the part of vassals if they did not “temper their riches and the happiness of their great fortune with moral policies and good customs.”

On the one hand, Cellorigo’s fanciful language mirrored what the earliest cosmographers had been writing about the New World. Oviedo had said that the first miners in Hispaniola did not find much gold, but that subsequent miners found enough gold to last until the end of the world.<sup>327</sup> But something had changed in Spanish thinking since Mercado wrote about price fluctuations in 1569: the debate had shifted from moral prescriptions for merchant behavior to more abstract notions of what prosperity meant. Spaniards needed to differentiate between

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<sup>326</sup>Martín González de Cellorigo, *Memorial de la política necesaria y útil restauración a la República de España y estados de ella y del desempeño universal de estos reinos (1600)* (Madrid: Instituto de Cooperación Iberoamericana, 1991), 11.

<sup>327</sup>Antonello Gerbi, *Nature in the New World: From Christopher Columbus to Gonzalo Fernandez de Oviedo* (Pittsburgh, Pa: University of Pittsburgh Press, 1985), 370.

prosperity derived from hard work and prosperity formed from relying on gold and silver. This would return Spain to its former glory.

For Cellorigo, agriculture was the cure for all of Spain's ills. If Spaniards sought to "increase of universal wealth in these realms," it would be "important that the people apply themselves toward the blessed occupation of working in the fields." In addition to increasing the nation's productivity, it would ward off laziness and force Spaniards to reevaluate their relationship with wealth.<sup>328</sup> He muses on the different things which can cause a republic to decline. According to Cellorigo, astrologers posited that republics declined because "the movement of the stars and the operation of the signs and planets" worked against them. Still others attributed the decline of republics "to human nature, believing that they slowly grow old, meeting their end through internal illnesses."<sup>329</sup> The constant use of images of fertility, sterility, and sickness meshed well with Cellorigo's imagining of the state as analogous to a human body.

Cellorigo reiterated the *arbitrista* focus on agriculture, saying that the "growth and universal wealth" of the Spanish realms depended on the people applying themselves to the "labor of the field."<sup>330</sup> But whereas writers like Lope de Deça emphasized the farmer, Cellorigo examined the roles of the ruler and the state within the context of agriculture. In matters of the state, a king that "would see his realms rich and powerful" and that would ensure that his vassals and subjects were fruitful could only achieve these goals by realizing that work, "as God had commanded men, is of such nobility that the rewards it gives to those who follow it never end."<sup>331</sup>

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<sup>328</sup>Ibid., 76.

<sup>329</sup>Ibid., 12-4.

<sup>330</sup>"Para el aumento y riqueza universal de estos Reinos importa mucho aplicar la gente a la dichosa ocupación de la labor del campo, a quien es muy propia la crianza de todas las cosas que fertilizen los estados..." In Cellorigo, 76-7.

<sup>331</sup>"...porque en la materia de estado no hay principio más sin excepción para el Príncipe, que quisiere ver sus Reinos ricos y poderosos, cuanto que se aproveche de lo que en ellos fructifica, y que a esto acudan sus vasallos



Lope de Deça sought to justify agriculture's primacy as a form of wealth and he went about this goal by drawing on tropes of classical literature as well as medieval texts. The idea of paradise was central to his argument; specifically, Spaniards could create a new paradise via agricultural labor. As A. Bartlett Giamatti notes, early modern Christian descriptions of the earthly paradise "owed as much to ancient literature as [they did] to Christian Biblical literature." These descriptions often carried with them the "ancient image of an island...with perfect climate, perpetual springtime, a sweet west wind, and a fecund earth." As the medieval period ended, this image may have declined at times but it never truly died.<sup>332</sup> Early modern writers outside of the Spanish Empire, like John Milton, tapped into similar tropes. In Milton's *Paradise Lost*, his gardens took on the general attributes described in ancient and medieval Christian texts, possessing a "perpetual springtime and extraordinarily fertile soil" along with an "abundance of water from springs, fountains, and rivers"<sup>333</sup> In a broad sense, the early modern obsession with gardens and paradise reflected a desire to "remind men there had once existed perfect love and harmony in a beautiful place."<sup>334</sup> This idea of reclaiming or creating paradise preoccupied medieval Christian thought and culminated both in the Renaissance epics and in the early modern Spanish reformer literature at the turn of the sixteenth century.<sup>335</sup>

By 1619, Lope de Deça located the origins of agriculture both within God's original act of creation and within original sin. After all, agriculture would not have been necessary in the perfect world that Adam and Eve forsook, since God provided everything they could possibly need. Deça later follows up this narrative with a rhetorical question: "who can say that he is not

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con cuidado, pues el trabajo, como ordenado de Dios a los hombres, es de tanta nobleza que jamás dejo de premiar al que le sigue." *Ibid.*, 77.

<sup>332</sup>A. Bartlett Giamatti, *Earthly Paradise and the Renaissance Epic* (Princeton: Princeton University Press, 1966), 32.

<sup>333</sup>*Ibid.*, 301.

<sup>334</sup>*Ibid.*, 3.

<sup>335</sup>*Ibid.*, 4.

a decedent of a farmer?” Marking the Garden of Even as humanity’s first farm, with Adam and Eve as the first agriculturalists, Deça’s narrative quickly grounds humanity as a whole within the agricultural experience. The land, acting as a central thread in the human experience, “forms our bodies, sustains them, and receives them.” Deça then situates the land within the order of existence, noting that nearly every other natural actor interacts with the earth in some way: “the other elements moisten it (the earth), aerate it, and heat it” while the planets and others influence it in other ways.<sup>336</sup>

Deça’s treatise on the utility of agriculture detailed a specific relationship between God, humanity, the land and natural resources. From the beginning of humanity’s time on Earth, Deça contended, agriculture was crucial to humanity’s survival and its essence. “The ancient ground of agriculture” was the place from which humanity “derived its ancient nobility” and it was within this “earthly paradise that God placed the first man.” The purpose of agriculture—and by extension, all of creation—was to provide for humanity’s survival. After mankind disobeyed God and original sin entered the world, God commanded that humanity “cultivate the land in order to sustain itself.”<sup>337</sup> Deça distinguished this paradise from paradise in general by emphasizing agriculture and labor. For early modern Spanish readers, this distinction was crucial. Dictionaries of the period reveal that scholars believed that the Garden of Adam and Eve had existed in reality. They speculated that this paradise was an “exceedingly pleasant garden (*huerto amenisimo*) toward the East where God placed our first father” and where the act of Creation occurred. The definition of paradise found in the *Tesoro* made no reference to agriculture, nor did it discuss paradise’s relationship with humanity in the specific way Deça

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<sup>336</sup>Deça., f. 2.

<sup>337</sup>“El solar antiguo de la agricultura, de donde tuvo principio, y se deriva su antigua nobleza, es el parayso terrenal en que Dios puso al primer hombre, obligado después de su cayda a cultiuar la tierra para sustentarse...” f.1

did.<sup>338</sup> The Biblical Paradise, where all of humanity’s needs would be provided for by God, would not have needed agriculture. Thus, Deça was toying with the nature of the word, pointing to a post-Fall paradise where agriculture was the key building block to its existence.



Figure 9: Saints Isidore (also spelled Isidro) and Maria, Patron Saints of Farmers. St. Isidore died in 1130 and was canonized in 1622, while St. Maria’s remains were transferred to Torrelaguna in 1615. Their work ethic and charity—they were said to have fed the poor in great amounts despite their own status as peasants—provided a religious and historical example of the spiritual and material dividends of an agro-pastoral lifestyle in early modern Europe.<sup>339</sup>

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<sup>338</sup>The *Tesoro* definition of “paradise” makes no distinction between paradise and the Garden of Adam and Eve: “En las sagradas letras se toma por un huerto amenisimo hazia la parte de Oriente, adonde Dios puso a nuestro primer padre luego que lo crió: y formó y fabricó a Eua de una de sus costillas; pero por el pecado de la inobediencia fué del.” In Sebastián de Covarrubias Orozco, *Tesoro de la lengua castellana o española* (Madrid, 1611), 578.

<sup>339</sup>See <http://www.ncrlc.com/page.aspx?ID=91>. Catholic Rural Life’s mission statement is to “apply the teachings of Jesus Christ for the betterment of rural America.”

The difference between the *Tesoro* definition of paradise and Deça's was that the *Tesoro* described paradise as something located in the past, forever lost to time. For Deça, paradise could be brought back into existence through the vocation of farming and through the bounty of natural resources the land still provided. Deça placed land and farmers within a complex matrix of interacting natural forces. The other elements "moisten (the land), aerate it and heat it" while the planets and other elements "influence it" in various ways. The land acted as a "treasury" (*erario común*) that offered the resources humanity needed: "metals, trees, seeds, and animals." But none of this would be possible, according to Deça, if agricultural practices did not organize the land so that it could "receive the elementary and celestial influences." It was the responsibility of the farmer to oversee this effort. Since the first people on Earth were farmers, Deça asked, how could anyone "say that he did not descend from a farmer?" The "noble profession of the farmer" (*noble oficio del Agricultor*) was defined by its "company and correspondence with the heavens, imprinting all of its virtues wherever it places its hands."<sup>340</sup> This passage reveals an underlying assumption on the part of Deça: the land, while it was created for humanity, needed human intervention and labor if it was to produce anything of value. The farmer was the key piece of the puzzle, providing labor and know-how to make the land productive.

Deça's praise of agriculture meshed well with other *arbitrista* polemics on the topic, in part because it reinforced long-standing beliefs about the inherent nobility and healthy morals that came with agricultural work. According to Deça, agriculture exceeded "the other crafts (*artificios*) in nobility" because it was "the most natural." Other means of acquiring wealth, by

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<sup>340</sup>“Los demas elementos la humedecen, olean, y calientan, los Planetas, y otros la influyen...es un erario común para quantas formas en ella se producen, y introduzen, como los metals, los árboles, las semillas, los animals...es la Agricultura que le sirue de disposición para recibir las demas influencias elementares, y celestes.” Deça, f. 1 and f.1 b.

comparison, were “human inventions” that were “worthy of hate and infamy” because they were “outside of nature.”<sup>341</sup> If non-agricultural pursuits were “human inventions,” the implication is that agriculture paradoxically stood outside the human experience as a gift from God and yet was fundamentally bound up in the essence of humanity’s existence on Earth. Deça’s description of paradise establishes the relationship between humanity and the natural world: the natural world is bound up with the experience of humanity and draws its existence from the existence of fallen humanity. Likewise, the human experience is inextricably linked with agriculture and with the natural world. Deça’s believed in a spectrum of activities that were considered “natural” or closer to nature and activities that were outside of nature. Deça was not referring to nature in any modern sense of the word beyond a base recognition that non-human actors like landscapes, plants, metals, and animals had a special relationship with humanity. Instead, it was that relationship that imbued the word, “nature” with any meaning. For Deça, nature could not be understood outside the context of the act of creation. In lieu of living in a heavenly Biblical paradise, humanity had to make due in an “earthly” one. For a reformer offering remedies to the problems that ailed Spain, the idea that Spaniards could recreate paradise via agriculture was more useful than the thought that paradise was irretrievably lost thanks to Adam and Eve’s disobedience.

In trying to link Deça’s tract on agriculture with the other *arbitrista* texts, a few commonalities occur. For Mercado, trade had its origins in God’s gift of knowledge to mankind. Christ’s apostles, along with classical philosophers, were given a divine mandate to act as arbiters of knowledge. Similarly, the merchant was called to keep in the spirit of the apostles while negotiating contracts so that the business could thrive. Mercado’s prime concerns were

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<sup>341</sup>“Con razon la Agricultura exceed en nobleza a los demas artificios...las demas suertes de grangear son inuencion humana, muchas dignas de odio, y de infamia, por ser fuera de la naturaleza.” In Deça, f. 2.

aligning commerce with the needs of the people and the nation. The implication beneath Mercado's reasoning is that there is a constant potential in dealings for corruption, or avarice. And the common good always seems to be under threat and, thus, in the most need of protection. Lope de Deça's agricultural treatise begins with the fall of mankind and the advent of farming as a way to preserve humanity in an imperfect world. He continually highlights farming as the most noble of professions; it would seem that he is not highlighting the negative aspects of human nature, but rather the redemptive power that comes with farming. Both authors ground their rhetoric in ideas of beginnings, of utility, of divine grace and the divine origins of different vocations (apostle, philosopher, merchant, farmer).

One chapter of Moncada's *Restauración política de España* is entitled "The poverty (pobreza) of Spain has resulted from the discovery of the Indies." Moncada argued that the discovery of the New World was the primary culprit for Spain's economic downturn, but he made a careful distinction between the inherent benefits of possessing an empire and the deleterious effects of empire that Spain had experienced. "The damage to Spain," he wrote, did not stem solely from the discovery of the New World because "the Indies has been very useful, since they have provided gold, silver, and very profitable commodities." The problem was not in the nature of New World commodities themselves. Instead, Moncada claimed that the damage to Spain came from poor management of those resources: "It is clear that the damage stemming from [New World commodities] is due to them not having been used well for the prosperity of

Spain.”<sup>342</sup> Moncada then says that “the entire being/purpose (*todo el ser*) of money is to afford appropriate things and, therefore, it has no value outside of that which one buys with it.”<sup>343</sup>

Moncada later speaks directly to the economic consequences of having too much precious metal: “with the abundance of silver and gold, the value has fallen and, consequently, (the cost) of what one can buy with money has risen.” These high costs mean that “the people remain obligated to such great costs, being unable to reach the great quantities that are appropriate for them.” In the third chapter, he speaks to the issue mentioned earlier by Mercado and Ortiz: foreigners as being a source of economic drainage from Spain...<sup>344</sup> By 1618, the Thirty Years’ War had begun in earnest and Spain’s days as the leading power in Europe were largely over. Spain’s leading intellectuals and reformers recognized this decline, but located its cause in the inherent moral failings of Spain’s merchant class.

### Conclusion

The economic and agricultural treatises produced by Spanish scholars in the sixteenth and seventeenth centuries located Spain’s economic and social decline in the overabundance of precious metals, the increase of prices, and the influence of foreign traders and the exportation of Indian gold out of Spanish coffers and into foreign lands. Early modern Spanish economic theorists imagined economic theory as being linked with a moral economy. The massive inflation caused by New World precious metals affected the economic life of Spaniards from different areas of society. While prices rose in the face of increasing demand for various goods, prices also

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<sup>342</sup>“El daño de ella no puede atribuirse al dicho descubrimiento, porque las Indias antes han sido muy útiles, pues solo han dado su oro, y plata, y mercaderías muy provechosas. Pero es llano que el daño ha resultado de ellas, por no haver usado bien de la prosperidad in España...” In Sancho de Moncada, *Restauración política de España y deseos públicos* (Madrid: Por Juan de Zuñiga, a costa de Francisco Manuel de Meno, 1746) 54.

<sup>343</sup>Ibid., 54.

<sup>344</sup>Ibid., 55.

increased because merchants were betting on the success Spanish explorers. When merchants made commodities too expensive for most people to afford, it was simultaneously an economic and moral malady. Luis Ortiz's argument links moral economy with the idea that labor was just as important as what was actually being produced. Combined with Mercado's ideas about the spatial relationship between the source of wealth production and the perceived value of different forms of wealth, there are some interesting ideas at work that seem protectionist. What seems to be interesting, though, is that protectionist economic policies in this did not come from economic reasoning alone; it was a moral issue as well. The fate of the *república* was at stake.



## CONCLUSION

### **Redefining Knowledge-Building in Early Modern European History**

Whether they knew it or not, people from a wide variety of professions and socioeconomic backgrounds were taking part in the same discussions about wealth, resources, and management during Spain's Golden Age. As Spain evolved from a poor, provincial backwater to the master of European politics and economics, so too did Spain's discourse of scarcity and abundance. People living in Iberian villages learned to make due with limited resources. Municipal councils, and then the Crown itself, were also aware of resource scarcity and acted accordingly. Environmental pressures helped to spawn conservation legislation in many Castilian municipalities and it was these environmental pressures that also shaped how Spaniards interacted with nature as they consolidated their hold over the Americas.

Historians have been eager to recognize the *arbitristas* as early modern Spain's most brilliant minds. As the story goes, these reformers recognized the backwardness around them and the inexorable failure of their short-lived empire. It is hard not to admire the pragmatism and lucidity with which these men diagnosed the Spanish empire's ills, even if Stanley and Barbara Stein's assertion is true that the invention of an imagined, glorious past was probably a tactic on the reformers' part to avoid critical thinking about the real past.<sup>345</sup> But as this dissertation has shown, the *arbitristas* were building on the earlier cosmological efforts of Spain's farmers, conquistadors, geographers, and priests. In early modern European history, knowledge-building is almost always portrayed as an elite endeavor. But this simply was not the case. Through the lens of environmental practice and thought, historians can see the extent to which every member

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<sup>345</sup>Stanley J. Stein and Barbara H. Stein, *Silver, Trade, and War: Spain and America in the Making of Early Modern Europe* (Baltimore: Johns Hopkins University Press, 2000), viii and 7.

of the early modern Spanish empire, whether he be farmer or king, was taking part in knowledge- building.

The purpose of knowledge-building during the decline of the Spanish empire was prescriptive. Early modern Spaniards wanted to find echoes of contemporary problems in the past and to discover how the great societies of the past dealt with them. Power emerges from a society's ability to discern which forms of wealth are healthy and how wealth should be used. Decline did not speak merely to a quantifiable economic downturn, but rather increasing anxiety over the shifting of cosmologies taking place in early modern Europe. The meaning of wealth and the meaning of work hung in the balance. Spain's medieval social order had already come under attack following the Reconquista. The Reconquista helped to destabilize medieval Castilian society by exacerbating social and economic tensions between Iberia's religious, ethnic, and social groups. The urban merchant class in the newly-conquered territories included many families of Muslim and Jewish origin, attaching further religious and moral stigma to medieval and early modern economic practices. The conquest of Granada in 1492, and the end of Muslim rule in Iberia, could not erase the centuries-old cultural, political, and economic thought that had been imprinted on Castilian society.<sup>346</sup>

Chapter one demonstrated the ways in which the Iberian physical environment laid the foundations of Spanish economic and political thought during the Golden Age. Emerging from medieval Castile's Moorish conquests, municipalities were the bedrock upon which early modern Spain's political cohesion was built. Those municipalities consolidated power, in part, by managing Spain's scarce food and timber resources. They decided how the land would be organized, decided which citizens would have access to which resources, and packaged their policies in a way that would appeal to Castilians' affection for citizenship. During the medieval

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<sup>346</sup>Grice-Hutchinson, 13, 44, and 83.

period and the early years of the sixteenth century, Spaniards had not yet been forced to confront the socioeconomic realities of New World wealth. As a result, the environmental discourses we saw in chapter one reflected local, practical concerns: access to food, the protection of forests and pastures, and the distribution of wealth between the landed nobility, the burgeoning merchant classes, and farmers. People's understanding of nature was tightly woven in with their understanding of how community and citizenship functioned. Only a tight, well-regulated community would be able to conserve scarce forest and pasture resources. Conservation—and agriculture more broadly—are aspects of early modern Spanish history that have been covered to various degrees in the literature, but they are never analyzed as intellectual history. But this dissertation's examination of environmental language reveals that farmers and local bureaucrats were thinking about wealth in a lasting, abstract fashion.

As the sixteenth century progressed, the Spanish monarchy also began competing with villages over the same scarce resources. This foreshadowed a transformation in early modern Spanish environmental practice and thought—the needs of the empire had to be considered along with local needs. The language of scarcity and abundance which would come to dominate early modern Spain's environmental discourse first appeared on the local level. This fact cannot be ignored when we consider the actions of Spanish conquerors in the Americas. These men encountered the New World with visions of poverty and conservation in their minds. In their writings, we see them trying to make some sort of order out of what is seemingly an exotic, infinitely wealthy expanse. Once again, the task of knowledge-building fell to those we do not commonly associate with such endeavors. Conquistadors and the accompanying historian-cosmographers had to juggle a variety of competing priorities when it came to documenting the Americas for the Crown. On the one hand, some of the cosmographers sought to provide a “real”

accounting of what they saw based on first-hand observation. But the conquistadors and other early cosmographers were more concerned with acquiring more funding from the Crown, which meant promoting the potentially endless riches of the Americas. The New World's plants, animals, and people needed to be described and quantified, their inherent worth assessed. Good government would be required to extract the New World's wealth properly.

Good government took the form of well-organized municipalities that signified the Crown's control over a region, the form of laws governing the good treatment of Amerindians in order to ensure their spiritual well-being and their ability to work effectively, and the form of massive bureaucratic projects that reproduced the New World in texts and maps. Once municipalities were founded and good Spanish government arrived in the form of municipalities, the New World stopped being exotic in the minds of Spaniards. This foreshadowed the next great evolution of Spanish environmental and economic thought as the sixteenth century progressed.

The task of managing a landscape with seemingly infinite natural wealth spurred a new generation of cosmographers, geographers, and historians. Their understanding of management and resources changed to reflect Spain's fortunes at the height of its imperial power. They faced the impossible quandary of managing an infinite resource with finite methods. Knowledge-building was the only way the empire could ever maximize their profits in the New World. As was the case with conservation practices on the Iberian Peninsula, the efforts of these cosmographers arose from practical concerns. The government of the New World had proven to be inefficient and rife with corruption. Within this fight against corruption laid the kernel of the final idea this dissertation examined. An infinite amount of wealth was not necessarily a good thing. It had the ability to corrupt the souls of men and, if not managed correctly, could actually engender poverty and passivity in human beings. This belief in the dangers of abundance was

reflected most clearly in the writing of Juan de Velasco, who measured the productivity and worth of peoples against their geography, environment, and access to resources. Having an abundant amount of resources at hand could be harmful to a society if that society did not make a conscious effort to perform work. Forgetting for a moment that the Spanish colonial economy was mostly built from the work of indigenous peoples and not from Spaniards' own work, the twin discourses of vice and laziness would dominate Spain's political and economic thought as the sixteenth century came to an end.

For the *arbitristas*, agriculture represented the perfect salve for what ailed Spain. It forced men to earn their fortunes with their own hands. Agricultural wealth was lasting wealth, not subject to the whims of the burgeoning Atlantic economy. It would improve Spain's economy domestically and would help the kingdom regain its political and economic mastery of the European world. This love of agriculture and disdain for precious metals and usury reflected yet another evolution in the Spanish understanding of management and nature. Agricultural wealth was good because it was primordial and of God. Adam and Eve were the first farmers and the existence of agriculture proved God's intervention in the physical world. The *arbitrista* narrative fit in nicely with Spanish intellectuals' efforts to revise their own history. Spain had an abundance of wealth in the past, but it survived and thrived because it used that wealth correctly in accordance with God's wishes. *Arbitrista* thought represented the perfect nexus of Counter-Reformation moral prescriptions, a growing belief in the power of observation, and the practical need to repair Spain's economy and infrastructure. The seeds of *arbitrismo* were planted in Spain's imperial experience. The discourses on management, scarcity, and abundance had evolved as the kingdom's fortunes rose and fell.

This project began as an examination of early modern Iberian environmental practice and thought in local terms. I wanted to zoom in on various locales of the Spanish empire and talk about farming, sheep, forests, and precious metals. But I found more success when I realized that I was not examining a static set of environmental ideas and thoughts. Cosmology, the study of origins and finding one's place in Creation, permeated the thought of all of my subjects precisely because the sixteenth century was such a traumatic episode in European history. Thus, cosmology proved to be the perfect unifying concept for all these disparate topics. Farmers, conquistadors, geographers, and economic reformers were all making judgments on the nature (in both senses of the word) of their world and their place in it.

This dissertation has made important contributions to environmental history, blending practical environmental policy with ideas about nature. On the level of material environmental history, this work has problematized the divide between urban and rural history.<sup>347</sup> For early modern peoples living in Iberia, the distinction between rural and urban simply did not exist. Instead, the municipality was the center of a patchwork of agricultural and social relations. Early modern Spanish civilization was based simultaneously around urbanity and farmers. Cities were the most elementary political unit in the republic and were important markers of civilization and authority during the Reconquista and the conquest of the Americas. But as chapter four demonstrates, the Spaniards also upheld the farmer as a paragon of virtue. Mixed husbandry, communalism, and the mastery of Mediterranean cash-crops were just as important to early modern Spain's identity.

J.R. McNeill, drawing on the work of Donald Worster and others, succinctly diagrams three brands of environmental history: material, cultural/intellectual, and political. Chapter four

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<sup>347</sup>J.R. McNeill, "Observations on the Nature and Culture of Environmental History," *History and Theory* 42 (December 2003): 6.

of this dissertation shows how this dissertation does not fit neatly into one of McNeill's three types of environmental history. And it is here where, perhaps, the biggest clash with environmental history lies. The debates that early modern Spaniards had about empire and economics took place in the realm of ideas. The reformers imagined multiple pasts: some of them took place in the Biblical past, other pasts were more immediate (the king of Granada and his unlimited horses, for example). Unimaginable wealth from the land characterized each past they described, and they believed that human labor could recreate these pasts. This early modern discourse on labor represented the intersection *of all three* of McNeill's types of environmental history: A) the Mediterranean landscape on the material level lent itself to agropastoralism and the ideal of the farmer which B) led to cultural representations of the environment and laid the foundation for C) political debates on which form of environmental interaction (precious metal extraction vs. agricultural labor) was best. But despite laying out three types of environmental history, McNeill and others favor the "modern" while implicitly and explicitly condemning a cultural reading of environmental history.

Thus, topics like the management of the environment or historical economies often take on a materialist tone that eschews any sort of cultural nuance in favor of searching for McNeill's "real nature." Asdal points to the real potential of environmental history when she says that the "discipline has also examined the meaning of climate, landscape, and resources for people's actions and various paths of social development."<sup>348</sup> Instead of treating the material and the cultural as a dichotomy, environmental historians must be willing to examine the interaction between the two. Otherwise, as Asdal warns, one risks stumbling into overreaction and thereby rejecting "the notion of ecology as pure ideology" and instead "seeking refuge in culture"<sup>349</sup>

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<sup>348</sup> Asdal, 61.

<sup>349</sup> Asdal, 64.

Constructing my dissertation as I have, I have sought to treat the material and cultural with equal respect. As Asdal notes, “a person cannot be understood as a free autonomous being.” It is through relationships that one illuminates his or her purpose in the world.<sup>350</sup>

Thus, when early modern Spanish reformers present their representations of the past and humanity’s relationship with the natural world, they are recognizing this fundamental truth of the human condition. But ultimately, Asdal arrives at the same conclusion that McNeill did. She argues that, as environmental historians, we ultimately want to know “how those constructions relate to material nature.”<sup>351</sup> This is a more diplomatic response to the material/cultural divide, but it reinforces the primacy of the material in environmental history. Perhaps Asdal was struggling with what Ellen Stroud also dealt with in her article. When debating whether or not environment should be placed alongside race, class, and gender as categories of analysis, Stroud states that “power is expressed everywhere. Thus, to say that environmental history is “about power relationships is to say both everything and nothing at all.”<sup>352</sup> Equally disturbing and confounding for the environmental historian—and therefore myself—are the plethora of vague terms floating around in the field: environment, nature, place, space.<sup>353</sup> How does one begin to construct a concise narrative about humanity’s relationship with the natural world when such simple terms often muddy the narrative?

This dissertation offers one answer in the form of getting into our subject’s minds and seeing the world as they do. Donald Worster offers yet another method by focusing on modes of production. While Worster’s work focuses on capitalism and the American landscape, early modern Spain was the site of its own modes of production. The Atlantic economy, which appears

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<sup>350</sup>Asdal, 71.

<sup>351</sup>Ellen Stroud, “Does Nature Always Matter? Following Dirt through History.” *History and Theory* 42 (December 2003): 80.

<sup>352</sup>Stroud, 76.

<sup>353</sup>Stroud, 77.



in multiple chapters of this dissertation, organized peoples and resources in various fashions and across many scales. Chapter four touches on two of those scales; 1) the arrival of gold and silver from the New World and the Spanish economy as a whole and 2) farming and the agropastoral landscape as a cultural force in early modern Spain. Worster himself briefly touches on the first scale when he discusses the arrival of capitalism on the world scene. He locates this so-called “great transformation” in the fifteenth century and onward, and he argues that this was as important as the Agricultural Revolution in terms of human development.<sup>354</sup> Chapter four’s discussion of New World precious metals reveals that not only was there a “great transformation” at work in the fifteenth and sixteenth centuries, but also that early modern Spaniards were keenly aware of said transformation, though they did not perceive it as an ecological transformation in the sense that Worster does. Instead, early modern Spanish thinkers worried that the opening of the Atlantic economy was taking a moral and spiritual toll upon the country. This fear bled over into the second scale with which chapter four works—farming and pastoralism.

Chapter one of this dissertation, detailing conservation and municipal management of forests and pastures, addresses this idea directly and demonstrates that the fields and forests of Spain were cultural sites as well as physical environments. Chapter four takes this idea in an interesting direction; when writers like Cellorigo and Lope de Deça argued that agriculture would save the republic, they were imagining agropastoralism as a discrete lifestyle and as a set of ethics. You could argue that they were comparing two different modes of production; one built on imperial capital, gold, and silver and another built on localized agriculture. Thus, this chapter adds a new layer to Worster’s “great transformation” by both demonstrating that process taking place in a tangible way in the sixteenth and seventeenth centuries and by also

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<sup>354</sup>Worster, “Transformations,” 1097.

complicating the same process by showing early modern Spaniards' attempts to contextualize it. The Atlantic economy—a necessary precursor to later capitalism—was met with equal parts enthusiasm and dread during Spain's Golden Age.

With this knowledge, the Crown could assess the potential wealth of its holdings and better control them. Crosby posits that it was not just the institutional and economic strength of Renaissance Europe, but its biological advantages that were just as important.<sup>355</sup> But it was precisely those institutional and economic forces—the Crown, the geographic and demographic surveys, the economic planning—that allowed those biological advantages to be brought to bear in the Americas. Those institutional and economic forces had as their foundation certain ideas about nature and wealth; knowledge about rivers and mountains and people could give the Crown an approximation of how much wealth it could extract.

What is lost in environmental histories built on the Crosby-Melville model, however, is the transformative power of texts and discourse. This does not mean Melville and her followers have ignored text. On the contrary, the sorts of analyses these authors perform requires an extensive knowledge of Spanish colonial bureaucracy and its paper trail. But their over-emphasis of quantitative data has handicapped our understanding of how empire exercised itself in Spain's American holdings. Spanish imperialism operated in more subtle ways than the fire-and-brimstone destruction of indigenous peoples and invasions of exponentially-multiplying ungulates. Empire operated in multiple dimensions. Using the power of text, New World writers took the vast and exotic lands of the New World and made them knowable. The discovery and conquest that characterized the early sixteenth century transitioned into categorization by the latter half of the century. In this way, the Crown hoped that a pueblo in New Spain could be imagined and managed in the same way as a Peninsular municipality. This form of

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<sup>355</sup>Crosby, 100-1.

homogenization was more subtle and more ambitious in its goals than the act of transferring Mediterranean livestock to New World territories. An environment, much like empire, operates on multiple planes of reality beyond the physical, ecological one. The environment could be manipulated physically, but as the *Relaciones* and Velasco's *Descripción Universal de las Indias* prove, it could also be manipulated in the realm of the imagination.

Viewing these works solely in terms of the acquisition of scientific knowledge poses its own problems. By rooting these New World texts too deeply into the history of science, the reader may lose sight of what exactly these texts were trying to do. An exploration and description of the New World commissioned by the Council of the Indies and the Spanish crown had a different character than Isaac Newton's alchemical experiments, or Einstein's discovery of gravitational relativity. The danger one encounters is getting lost in the teleology of constant scientific advancement in the modern period. While early modern Spaniards did search for new solutions to their problems, they never broke with the past completely. Even as they accepted the existence of a "Second Earth," they explained its existence in Aristotelian, neo-Scholastic terms. As the sixteenth century progressed, cosmographers did not seek to uncover "hidden secrets of nature" and had an "unquestioned commitment" to Aristotelian natural philosophy, but did not seek to explain causality as earlier cosmographers had done.<sup>356</sup> Early modern Spanish science was tightly wound up with the imperial state and specifically focused toward reconciling all that was "new" with what Europeans already knew. But this impulse to demystify the New World was not monolithic and did not take the same form at all times. Instead, a variety of historical actors from different sectors of Spanish society collaborated, intentionally and unintentionally, to explain new phenomena based on their own specific needs.

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<sup>356</sup>Portuondo, 304.

The Crosby and Melville narrative imagines Spanish environmental thought as a cohesive whole that is largely ahistorical or, in the case of Crosby, so wed to biological evolution and deep time that it might as well be ahistorical. Furthermore, Crosby's narrative treats the arrival of Spaniards in the Americas almost as a historical accident. From his perspective, Europeans and their accompanying plants and animals formed a block of monolithic Old World organisms. By placing the environmental history of the Spanish empire in the context of ideas, we problematize the dominant historical narrative of the Spanish empire by adding *adaptation* to the story. Crosby's definition of culture stresses adaptability: culture is "a system of storing and altering patterns of behavior not in the molecules of the genetic code but in the cells of the brain."<sup>357</sup> Just as cultures adapt to changing historical and environmental circumstances, the thought and ideas behind those cultures also adapt. My project traces that adaptation on both sides of the Atlantic, showing how European and Iberian agricultural and political ideas crossed the Atlantic and then how early modern Spaniards reevaluated their fundamental beliefs about nature and the economy in light of the successes and failures of their imperial ventures.

Andrew Sluyter touches on the exportation and adaptation of environmental ideas in his discussion of the importation of cattle and livestock into Mexico, but the reasons for Spanish activity in the Americas go beyond simple environmental homologues. It is important to know the environmental and political impact of Spanish practices, but Crosby and Melville do not answer the crucial question of *why* the Spanish brought these practices with them in the first place. Every sheep that rummaged through indigenous fields carried with it cultural baggage and justifications for why its presence was beneficial in the eyes of Spaniards. Municipalities were *good*, stubble-grazing was *good*, sheep and pigs were *good*. This dissertation lays out the ideas about nature that underpinned Spanish imperialism, demonstrating that the empire was not an

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<sup>357</sup>Crosby, 14.

accident or merely the chaotic reintroduction of Old World and New World organisms. Instead there was an internal logic to Spanish imperialism in terms of its ideas about nature that was reflected in Spanish material practices. In the play that was the Spanish empire, Crosby and Melville have constructed the stage, have written the plot, and have introduced the most important actors. My work demonstrates why that particular stage exists at all and what gives the stage its shape.

The evolution of Spanish economic thought in the sixteenth century deserves a larger seat at the table of economic history. What had started as a medieval awareness of the natural limits that must “eventually restrain the accumulation of wealth” evolved into something much more complex by the end of the sixteenth century. Their experience with empire taught the Spaniards that unlimited resource may be real in the Americas, but that those resources may not lead to sustainable wealth that would better Spanish society. Centuries before Adam Smith and other economists in the eighteenth century argued that mercantile wealth could revitalize society if invested properly, Spanish intellectuals like Tomás de Mercado and Lope de Deça were making similar claims.<sup>358</sup> None of this economic thought would have been possible if not for the experience of empire and the peculiar pressures it placed on sixteenth-century Spanish society. As Worster says, revolutions do not emerge in a vacuum but rather from humanity’s ability to evolve in the face of “new possibilities or new limitations, responding to new information and opportunity.”<sup>359</sup>

Finally, this dissertation calls into question the idea that Spain was at the margins of the Scientific Revolution. European historians have too often imagined Spain’s intellectual history in the context of a Spanish decline, believing that the tangible signs of socio-economic decay in

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<sup>358</sup>Worster, *Second Earth*, 42 and 45.

<sup>359</sup>Worster, *Second Earth*, 221.

Spanish society were also signs of intellectual malaise.<sup>360</sup> While Spanish cosmographers did not have modern scientific tools or methods, they were on the frontlines when it came to reconciling the natural phenomena of the Old and New Worlds. The Spanish empire produced vast amounts of cosmological literature, economic treatises, and cartography in an attempt to solve the most important epistemological crisis in the history of Western Christendom. The empire's knowledge-building was a monumental achievement, made even more remarkable by the fact that different sectors of society unwittingly were piecing together new conceptions of wealth. From the forests of Andalusia, to the mines of Hispaniola, to the desks of Spain's leading intellectuals and reformers, wealth and its meaning evolved in the face of turbulent historical change.

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<sup>360</sup>Portuondo, 13.

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