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Humanity and Nature: From Vergil to Modernity

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Introduction

Though ecology is a relatively new field of study, the human relationship to nature has shifted and changed throughout history. In antiquity, it has been understood by scholarly consensus that there was a more general understanding of nature as a living force with spirit, for example the Roman animist concept of *numen*, and humanity being one with nature. In modernity, however, under the influence of Rene Descartes and Francis Bacon, nature is seen as completely separate from humanity and devoid of any value beyond the economic value of resources. Later philosophers such as Nietzsche lamented this shift, advocating for a return to ideas from antiquity. By contrasting ancient practices in farming and urban design with modern practices, as well as the literature produced by both periods, differences in outlook between ancients and moderns viewed nature become clear. This allows for a more accurate understanding of ecology in ancient Rome beyond a simple caricature of animist harmony.

Donald Worster, a leading historian in the development of environmental history in the twentieth century, sets out two different ecological paradigms: the arcadian and the imperial, which correspond to the ideas of antiquity and modernity, respectively. Arcadian ecology follows the ideals of antiquity, wherein nature had intrinsic value and divinity within it, as its Vergilian name implies. However, the influence of Christianity diminished these ideals, and separated humanity from nature, since it proclaimed that humanity was the master or protector over nature with a special relation to God. This separation from nature finally leads to the philosophy of Rene Descartes, who builds upon the already established Christian separation from nature to prescribe humanity's mastery and possession over nature. Descartes' philosophy cemented the imperial ecology within modernity, with its beliefs in nature having value only in the sense that it can be used as a resource, and that there is nothing divine, no soul or *numen* in nature. In a Cartesian sense, nature is only body, with no soul.

¹ The setting of Vergil's *Ecloques*, particularly the 4th and 10th, is Arcadia, from which Worster derives his term.

² Donald Worster, "The Empire of Reason," in *Nature's Economy* (San Francisco: Sierra Club Books, 1977), 27.

³ Worster, "Empire," 26-27.

With these two ecological paradigms established, I will begin with an overview of the modern imperial ecology that remains largely influential. Starting with the Cartesian theory that lies at the basis of this paradigm, I will trace Descartes' influence through later ecological thinkers such as Frederic Clements as well as other city planners. This will lead into the specific study of American and British cities, particularly Chicago, to find that the imperial ecology is exemplified in their historical development.

With this foundation set, I will then contrast the ancient Roman city with Chicago and other modern cites, clarifying the contrast between the arcadian and imperial ecologies with the contrast between these cities and their practices. Though the arcadian view lacks a specific philosopher in the same way that the imperial has in Descartes, I will still study select literature of antiquity to find the deeper ideological underpinnings of arcadian ecology, specifically the *Georgics* and *Eclogues* of Vergil. Douglas Hoeg suggests that pre-modern societies developed narratives in an evolutionary way, as stories and religious practices that promoted more sustainable ways of living allowed those who practiced them to live longer and have more progeny, thus passing down the sustainable narratives. Following this logic, I will find the arcadian narrative within Vergil to promote a more sustainable way of life, contrasted against the unsustainable issues of modernity. In short, Vergil may not be defining a new ecological paradigm, but he is reflecting one that was popular during his time. My comparisons between modernity and antiquity will then allow for the development of a more nuanced understanding of Roman ecology during the early empire, revealing that, although Romans still maintained a more animistic view of nature, their worldview was not wholly animistic, as Romans in both city and country struggled with similar issues in nature as have people in modern times.

Chapter I: Descartes and Imperial Ecology

Part I: The Development of Imperial Ecology

⁴ Jerry Hoeg, "Why Did Narrative Evolve?" Studies in Literary Imagination 42, no. 2 (Fall 2009): 6.

By understanding modern imperial ecology and its underlying philosophical premises, we may then easily contrast the arcadian ecology against it and critique it in comparison with the arcadian ecology. Donald Worster provides this useful term "imperial ecology," but his explanation of it ignores Rene Descartes. Here, I will argue that Descartes' philosophy fits perfectly within imperial ecology, and then demonstrate the further influence of Descartes and imperial ecology on modern cities. Cartesian thought is the philosophical peak and culmination of imperial ecology, and its influences are apparent in the development of modern cities.

The imperial ecology that culminates in Cartesian philosophy has a long history that extends back to early Christian influences. Donald Worster developed this term to mean one that "has made the domination of the earth—often promoted in the name of purely secular welfare—one of modern man's most important ends." Though Worster does not mention Descartes by name, Cartesian philosophy clearly parallels this idea with, as seen in Descartes' assertion that understanding the natural world leads humans to "make ourselves masters and possessors of nature" (*Discourse on Method* 61-2). Both the imperial ecology and Cartesian philosophy promote the use of the natural world as a means for bettering the lives of humanity, and this idea of mastery over nature rests on the foundations of a mechanical worldview and the removal of pagan beliefs in the intrinsic value of the natural world. This removal originated from the Christian concept of the Good Shepherd. Therefore, by understanding the common Christian influences, it becomes clear that Descartes is a continuation and culmination of Worster's concept of imperial ecology.

⁵ Donald Worster, "The Empire of Reason," in *Nature's Economy* (San Francisco: Sierra Club Books, 1977), 29.

The Christian ideal of the Good Shepherd established the foundation for the development of imperial ecology by both uprooting pagan animism that saw humanity as part of a natural world with intrinsic value and by establishing the idea of a mechanical world. Worster explains that Christianity moved western societies away from the pagan arcadian understanding of ecology by changing the meaning of the pastoral with the image of Christ as Good Shepherd, as the shepherd is not immersed in nature and his flock but instead is an outside protector of his flock against nature. This contrasts to the ancient pastoral imagery, in which the shepherd is surrounded by divinities and joins with nature. Worster thus concludes that Christian influence is "anti-natural" as "a shepherd's pastoral duties have been limited to ensuring the welfare of his human charges, often in the face of a nature that has been seen as corrupt and predatory." Christianity made it so that nature was no longer rejuvenating and integral to human life, but instead nature was a danger and a problem to be protected against.

This separation of humans from nature thus allows for the development of the mechanical understanding of the world, which proposes that the world operates according to natural laws and functions without some end or reason, as opposed to a teleological point of view, in which there is a final cause or purpose for the world. Whereas the Pre-Christian pagan understanding of the cosmos viewed the natural world as one filled with divinities, gods, and many other spirits, the Christian understanding of nature is, at best, that nature is God's creation but is still fundamentally separate from God, and at worst, that nature is fallen. It is from this intellectual background that Rene Descartes developed his philosophy. Separation from the natural world allowed humans to view the world differently and in a supposedly more rational manner, as

⁶ Worster, "Empire," 26.

⁷ Worster, "Empire," 26.

⁸ Worster, "Empire," 27.

"Christianity made this detached, external view of nature possible by overthrowing pagan animism, in which the human mind was submerged in communion with the inner, vital spirit of the natural world." This then leads to the development of a mechanical understanding of the cosmos by viewing the world as "fashioned according to a wholly rational, intelligible design," created by a divine Creator. Here is a middle-ground understanding between the pagan arcadian view and the imperial that culminates in Descartes. The natural world is rationally designed and intelligible, as Descartes also thought, but unlike Descartes, this view highlights the divinity of nature. Nature is not intrinsically divine, as the pagan view proposes, but is simply created by God for cultivation by man. Nature is purely body, in a Cartesian sense, and lacking mind is therefore open for the human mind to act upon it. Donald Worster then utilizes Francis Bacon to demonstrate the development of the imperial view from this Christian one. By understanding how Worster connects Bacon's imperial worldview with the earlier Christian one, Descartes' own connection with the imperial view becomes apparent.

Francis Bacon utilizes the foundations of the separation of humans from nature in this Christian view to develop the "imperial ecology." Bacon builds from the Christian idea of shepherds being the guardians and defenders of their flock, thus separating them from nature, but instead applies scientific understanding to nature. Bacon argues that empirical scientific understandings should be made to utilize nature in humanity's favor. As Worster states, "the good shepherd of the Christian tradition has become the scientist and technocrat"— Bacon builds upon the Christian assumption of separation between humanity and nature to establish that the study of nature is only the beginning of utilizing it to human advantage. ¹¹ Bacon also moves

⁹ Worster, "Empire," 29.

¹⁰ Worster, "Empire," 29.

¹¹ Worster, "Empire," 30.

beyond the mechanical view of the world by rejecting universal theories, suggesting they only serve as idolatrous distractions rather than concrete truths. 12

Richard Eldridge demonstrates the shift in these ecological paradigms using the terminology of Northrop Frye, which then illuminates the similar roles of Bacon and Descartes in developing the imperial view. Eldridge connects Frye's metonymic-intellectual stage of literature in society with Christianity. This stage itself emerges from the metaphorical-mythological stage which was prominent in antiquity according to Frye's scholarship. This metonymic-intellectual stage's use of allegory lends itself to leadership of masters of interpretation of Christian metaphors. ¹³ This stage shifts into the modern demotic-scientific-manipulative stage, in which Descartes moves authority from masters of religious interpretation to masters of scientific explanation. ¹⁴ Again, the shepherds have been replaced by the scientists.

The shift in modernity that results in the imperial view also results in the rejection of teleological and universal theories, as Worster pointed out regarding Bacon. Nature has no meaning or final purpose, and thus humanity is free to apply its own purpose and work nature to those ends. Eldridge suggests that if nature is simply blank matter, with special intrinsic value or meaning, then it logically follows that nature can easily be used to serve humanity. ¹⁵ This is again the same conclusion of the that may be drawn from the imperial view that proposes human control over nature. It further understands Descartes' own rejection of nature as teleological that

¹² Josh Reeves, "On the Relation Between Science and the Scientific Worldview," *The Heythrop Journal* 54 (2013): 557. https://doi.org/10.1111/j.1468-2265.2011.00716.x.

¹³ Richard Eldridge, "Romanticism, Cartesianism, Humeanism, Byronism Stoppard's Arcadia," In *Literature, Life, and Modernity*, 27–48. Columbia University Press, 2008. https://doi.org/10.7312/eldr14454-003.

¹⁴ Eldridge, "Romanticism, Cartesianism, Humeanism, Byronism Stoppard's Arcadia," 32.

¹⁵ Eldridge, "Romanticism, Cartesianism, Humeanism, Byronism Stoppard's Arcadia," 29.

leads to his proposal for mastery and possession over nature then demonstrates his connection to this imperial view.

Part II: Descartes' Imperial Ecology

Descartes' rejection of nature having teleological and interconnected meaning follows alongside Bacon's own rejection of universal theories in establishing the imperial ecology.

Descartes' rejection of intrinsic meanings and purposes in nature is a rejection of the vestigial arcadian elements pertinent to the mechanical cosmology. Reeves contextualizes the necessity of rejecting teleology as the prevailing Aristotelianism in the West proposed understanding the world in a deeply interconnected manner. But this became problematic as discoveries by Galileo and others challenged certain Aristotelian notions. ¹⁶ Developments in scientific understanding of the world, such as the heliocentric model of the solar system, led Descartes to reject Aristotelianism and instead propose a new mechanical view of the world without intrinsic value in matter or the natural world, but only mathematical properties that can be quantified. ¹⁷ Thus, matter and the natural world lost any special meaning, but instead became simply resources able to be calculated and controlled.

The loss of intrinsic value in the natural world allows Descartes to position humanity over the natural world, leading to the justification for humanity's mastery and possession over nature. In his *Meditations*, Descartes concludes that the human being is divided into a dualism of mind and body (*Meditation* 78), and this separation of the mind from body allows for the mind to remain aloof from material bodies in order to understand the world more rationally. This is a continuation of the process seen with the Christian view as it developed the mechanical

¹⁶ Reeves, "Scientific Worldview," 555.

¹⁷ Reeves, "Scientific Worldview," 555.

worldview. Though detachment from nature may seemingly be detrimental to opponents of Descartes, this detachment may instead be a benefit for the Cartesian view, as this disconnection allows for a rational understanding of the world.¹⁸

The human possession of mind further places humanity over the natural world as nature lacks mind, intrinsic meaning, or value of its own. As rational beings, humanity is able to go through the process of doubt and reaffirmation that Descartes undergoes, whereas animals and nature cannot. Descartes concludes that animals cannot do so as they have no mind and are only body, like all other natural beings, and therefore cannot feel as humans do (*Discourse on Method* 59). As Reeves points out, the rejection of intrinsic value in matter precludes animals from having mind, but instead they must act mechanically as with the rest of nature. ¹⁹ Humans are thus above nature owing to mind, which allows them to reason and understand the world, and thus become more like God, the supreme source of all infinite knowledge (*Meditations* 29). This is a natural justification for human mastery and possession over the world: if humans are able to become more like God, then they are therefore the most apt to pursue mastery over God's creation.

Descartes' positioning of humanity above nature alongside the removal of intrinsic values from nature thus allows for Descartes to advocate for human mastery and possession over the natural world. This mastery is not for the sake of domination, power, or wealth, but instead for "uninterrupted leisure" (*Discourse on Method* 57). This mastery is thus the liberation of humanity from nature, so that humanity no longer has to worry about the dangers of the natural world—a continuation of the Christian theme of the Good Shepherd. As man's mastery over

¹⁸ Eldridge, "Romanticism, Cartesianism, Humeanism, Byronism Stoppard's Arcadia," 36-7.

¹⁹ Reeves, "Scientific Worldview," 556.

nature "increasingly frees him from determination by 'nature,' it enhances his autonomy," 20 demonstrating that this process of mastery even further separates humanity from nature.

Descartes implements a new mathematically based mechanical worldview in order to achieve this mastery and possession over nature. It is possible to utilize mathematics to understand all aspects of the world since Descartes has already done away with intrinsic values, making all matter in the natural world essentially the same, best understood with mathematical calculations. ²¹ This mathematical worldview is even preferable to Descartes as he points out that mathematic explanations in themselves are universal (*Meditations* 64), and therefore can be universally applied. Descartes thus continues the mechanical worldview that was developed in the preceding Christian view but removes the pagan vestiges of essential values from it. No longer does nature have any teleological meaning, but only a mechanical meaning that is understood quantitively, allowing nature's intrinsic value to be replaced with the value of utility.

Descartes' belief in the universal application of mathematics clearly distinguishes him from Bacon's rejection of universal theories, but Descartes is more aligned with the imperial ecology in this regard. Descartes' proposal for a universal theory does not fall into the trap of anthropomorphizing or idolatry, as Bacon fears. Instead, it provides a way in which humans can fully dominate and utilize the earth, rather than the viewpoint of Bacon that rejects universal theories. In a sense, Descartes' view is more imperial, separating humanity more from nature with a stronger sense of mastery over nature.

²⁰ Peter Schouls, "Descartes and the Idea of Progress," *History of Philosophy Quarterly* 4, no. 4 (October 1987): 423. https://www.jstor.org/stable/27743829.

²¹ Reeves, "Scientific Worldview," 556.

Part III: The Application of Imperial Ecology

City builders in modernity utilized imperial ecology and Cartesian views on the relationship between humanity and nature, particularly regarding the assumption that humans are separate from nature. This separation of humanity from nature led to the understanding of the city, with dense populations, to be the center of human life as juxtaposed to the supposedly untamed regions outside of the city. Cities thus developed an exploitative relationship to surrounding regions, adopting a mindset of growth at all costs built upon Cartesian ideas of mastery over nature. But the perceived separation of humans from nature then leads to a lack of realization of the affects that the surrounding environment has on humans and cities, resulting in the contradiction that cities and people simultaneously harm the environment on which they rely.

To understand the process by which cities developed an exploitative relationship with nature, it is first imperative to understand that concepts of wilderness and nature were transformed by modern Cartesian understandings in the industrial revolution. This will help reveal what is problematic about modern thinking as it ties into imperial ecology. David Wachsmuth explains that the concept of wilderness is a human creation that emphasizes the contrast between urban and non-urban spaces. ²² As cities developed industries and swelled in population during the 1800s, they were understood to be the sites of progress and industry, thus holding power, whereas the countryside was understood by urban residents as an unpopulated "outside" area. ²³ This is a continuation of the processes seen with Descartes and imperial

²² David Wachsmuth, "Three Ecologies: Urban Metabolism and the Society-Nature Opposition," *The Sociological Quarterly* 53, no. 4 (September 1, 2012): 508–9, https://doi.org/10.1111/j.1533-8525.2012.01247.x.
https://doi.org/10.1111/j.1533-8525.2012.01247.x.
https://doi.org/10.1111/j.1533-8525.2012.01247.x.

ecology. Just as the natural world was deemed to be empty of meaning, giving all agency to human beings, the countryside was turned into an empty space, giving all agency to cities.

Because cities and humans are given comprehensive agency, they are enabled to expand and utilize the natural world around them to an extent only limited by the amount of surrounding nature, resulting in a mindset that idolizes growth. Because Cartesian mastery over nature is the solution to bring humans leisure, mastery over more nature becomes the solution to most problems. This is apparent in economic solutions, as Daly and Farley point out that growth will always appear to be an easier and more palatable solution to most problems rather than distribution.²⁴ This is because growth only occurs at the expense of nature, which has no value in the imperial view other than to be utilized by humans, whereas distribution occurs at the expense of people. This growth then manifests in a process of *creative destruction*, which Douglas Rae describes as new wealth being created through the destruction of the old.²⁵ Applied to nature, cities generate new wealth through expansion and utilization of natural resources.

However, this expectation of near limitless growth is problematic because the natural world does indeed have limits. Daly and Farley explain this as economies are open systems, and thus are capable of limitless expansion of free-flowing matter and energy, whereas nature is a closed system with limited amounts of matter. Therefore, if growth is treated as the only solution and limitless growth is further encouraged, the needs of the economy to sustain such growth can potentially surpass the limits of the natural world, turning creative destruction into simple destruction as the world runs out of resources. This continues to be problematic due to

²⁴ Herman Daly and Joshua Farley, *Ecological Economics* (Washington: Island Press, 2011), 13.

²⁵ Douglas W. Rae, "Creative Destruction and the Age of Urbanism," in City: Urbanism and its End (New Haven: Yale University Press, 2003), 7.

²⁶ Daly and Farley, *Ecological Economics*, 15.

humanity's separation from nature, since it leads the problems and dangers of limitless growth to be ignored as the actual connection to and effect of nature on humanity and cities are ignored. Wachsmuth finds this problem in the writings of ecologist Ernest Burgess, who understands cities as self-contained systems, but also believes cities are in a state of constant growth, thus forever conquering more nature and adding more to the supposedly self-contained city.²⁷

This then leads to the root problem: the separation of humanity and nature within the imperial ecological worldview. It is the root problem in three ways. First, this separation led to the exploitation of nature by cities and humans. Second, it incentivizes solving problems through further growth and exploitation, only making the problems of exploitation worse. Third, it leads to an understanding of nature that only focuses on how to benefit the leisure of humanity immediately. This last factor is what leads to the application of limitless growth within a closed system. Following the cyclical patterns of nature may in fact be more efficient in the long term, but exponential growth is seen as much more efficient in the short term. The pervasiveness of this growth is also illustrated with two examples. First, Paul Hawken points out that business and political leaders argue that growth is a prerequisite for environmental protection, as economic growth is needed to pay for it.²⁸ This is circular, since it argues that expansion over nature is the only way to stop expansion into nature. Secondly, William Cronon points out that "whether we celebrate the city or revile it, whether we wish to 'control' nature or 'preserve' it—we unconsciously affirm our belief that we ourselves are unnatural. Nature is the place we are

²⁷ Wachsmuth, "Three Ecologies," 512.

²⁸ Paul Hawken, "The Creation of Waste," in *The Ecology of Commerce* (New York: HarperCollins, 1993), 58.

not."²⁹ Even a supposedly more nature-friendly viewpoint is still warped by the imperial ecology that separates humanity from nature.

This separation of humanity from nature manifests in multiple unsustainable and even unhealthy practices in cities, particularly regarding waste. This is apparent particularly with sewage and fecal waste: instead of returning such waste to farmland to return nutrients to the soil, it is dumped through sewers. Wachsmuth describes this transformation: "What had previously been a circulatory metabolism was becoming a one-way flow." Some cities, before the advent of sewers, utilized cesspools to store such waste and then this would be collected by farmers to utilize, but these were replaced by sewers which were deemed to be more efficient and supportive of growth. This is also the case with solid waste in landfills. Alternative methods were available such as recycling, feeding waste to pigs, composting, and simply reducing output of garbage, but these were instead seen as too inefficient compared to utilizing landfills.

The disposal of waste in unnatural processes reflects the problem of human separation from nature, as humans do not follow natural processes. This has deep Cartesian connections, as Descartes proposed mastery over nature as a way of liberating humanity. Consequently, putting a limit on limitless growth does seem to be a form of returning to repression of nature in this regard. However, aiming at limitless growth may not even be the most efficient path in the long term. This is seen with sewage, since utilizing sewage waste as fertilizer is a more efficient use

²⁹ William Cronon, "Prologue: Cloud over Chicago," in *Nature's Metropolis* (New York: Norton & Company, 2012), 18.

³⁰ Wachsmuth, "Three Ecologies," 514.

³¹ Joel A. Tarr, "The Search for the Ultimate Sink: Urban Air, Land, and Water Pollution in Historical Perspective," *Records of the Columbia Historical Society, Washington, D.C.* 51 (1984): 3.

³² Tarr, "Ultimate Sink," 18.

of a resource but also is less simple than easily dumping into a sewer. Also, clearcutting forests may provide more wood in the short term, but it undermines the natural processes that maintains such forests and would ultimately provide more wood.³³ These are reasonable solutions, but the imperial ecology's separation of humanity from nature ignores them for supposed lack of immediate efficiency.

Cartesian thought and imperial ecology have had lasting and problematic effects on the development of humanity and cities in modernity, leading to the perceived separation of humans and nature. As illustrated by the explanation of the changes from the Christian view to the imperial, this modern imperial ecology has not always been dominant, and thus may be challenged by another. Understanding imperial ecology opens the way to criticize it and contrast it with other ecological understandings, such as the ancient arcadian view, and form a new ecological paradigm.

Part IV: Nietzsche against Imperial Ecology

Just as Descartes can be understood as establishing a new ecological paradigm, the reaction against Descartes by Friedrich Nietzsche can be understood on ecological grounds. Though Nietzsche wrote far in advance of Worster, and even the concept of modern ecology was yet to be born, Nietzsche's criticisms of modernity may be applied to imperial ecology just as they may be applied to Descartes. Nietzsche's critiques of modernity are numerous, but I will focus on specific critiques found in *The Gay Science*³⁴ that may be considered direct critiques of the Cartesian worldview, and thus imperial ecology.

³³ Hawken, "The Creation of Waste," 48.

³⁴ Friedrich Nietzsche, *The Gay Science*. Cambridge Texts in History of Philosophy, ed. by Bernard Williams.

Nietzsche argues against very fundamental notions of modern science central to the Cartesian worldview. He argues that scientific inquiry fails to truly understand anything and provides only descriptions rather than explanations. He further argues "And how could we explain! We are operating only with things that do not exist – with lines, surfaces, bodies, atoms, divisible times, divisible spaces. How is explanation to be at all possible when we first turn everything into a picture – our picture!" Here, Nietzsche argues that scientific inquiry cannot find whole truths, but instead always results in simplifications meant to assuage human fears of an indifferent world. This can be understood as a critique of the imperial ecology specifically, as it argues there is more to the natural world than just what a simplified human understanding can grasp.

Nietzsche's criticisms of the Cartesian worldview become more explicit as he turns to warn against not just oversimplifications in science, but oversimplifications in understanding the entire world. In aphorism 109 of *The Gay Science*, Nietzsche warns against viewing the world as a living being, as well as against viewing the world as a machine.³⁶ The view of the world as a living being can be connected to arcadian ecology, bringing intrinsic living value to the world, whereas viewing the world as a machine is much akin to the imperial understanding of the world as a resource that can be used without value beyond its use. Nietzsche critiques both these viewpoints as mistaken because they simplify the world and anthropomorphize it, as this anthropomorphizing conceals the reality that the world is chaotic and impossible to fully understand. By anthropomorphizing the world, it becomes more recognizable, providing comfort to avoid confronting a chaotic world. Nietzsche concludes this aphorism with the question,

³⁵ Friedrich Nietzsche, *The Gay Science* 112.

³⁶ Nietzsche, *The Gay Science*, 109

"When will we have completely de-deified nature? When may we begin to *naturalize* humanity with a pure, newly discovered, newly redeemed nature?"³⁷ Thus, though Nietzsche critiques the Cartesian worldview, he does not seek to simply return to the arcadian, which is both impossible and unideal. For both the arcadian and imperial views, according to this thinking, humans are excluded from nature either because nature is divine (as in the arcadian) or because nature is below humanity (as in the imperial). By simply accepting nature as it is without the baggage of either worldview, humanity can thus become closer to the natural world once more.

These critiques of scientific oversimplification and the failure of humanity to understand the natural world largely undercut the basis of imperial ecology, which is based on scientific understanding utilized for mastery and possession of nature. Nietzsche takes this criticism a step further by suggesting that this use of science is not necessarily for the best. Nietzsche admits that science can escape the old Stoic ideas that there can be no pain without pleasure and no pleasure without pain. However, while the imperial ecology may presume that science can thus bring great pleasure without great pain, Nietzsche suggests that the opposite may easily be true, as it may be simply a great giver of pain. ³⁸

Lastly, Nietzsche laments the loss of meaning within the world with his aphorism 343, which proclaims that "God is dead," reflecting the loss of meaning to the world with the imperial Cartesian worldview.³⁹ For Nietzsche, the end of the arcadian ecology does bring the potential for a new worldview to develop, but this coincides with the danger of feeling uprooted. The death of meaning in the world leads to the world becoming an "open sea."⁴⁰ There is thus

³⁷ Nietzsche, *The Gay Science*, 109.

³⁸ Nietzsche, *The Gay Science*, 12.

³⁹ Nietzsche, *The Gay Science*, 343.

⁴⁰ Nietzsche, *The Gay Science*, 343.

potential for the finding and discovery of new meaning and new understandings of the world, but also being lost while doing so. Nietzsche elaborates on this further with his aphorism on the infinite, where he explains the fear and danger of infinite possibility with the open sea metaphor: "Woe, when homesickness for the land overcomes you, as if there had been more *freedom* there – and there is no more 'land'!"⁴¹ The speaker is on the open sea, and realizes that he is completely free to create new meaning in the world, but subsequently he has nothing stable, no "land," to cling on to. The comfort of the anthropomorphized world is lost at the open sea, and a chaotic world stretches out before us.

Thus, Nietzsche provides multiple criticisms of the detrimental effects of the imperial Cartesian worldview on humanity. First, he questions the validity of scientific understandings of the world. Second, he critiques the Cartesian worldview for its oversimplification. And lastly, he points out the ways in which the loss of the arcadian worldview is dangerous as well as bringing about new potential. Nietzsche thus views the world of antiquity as a lost ideal, but by comparing the ecological understanding of the Roman during the early empire with modernity, it becomes apparent that antiquity was not at a perfect idyllic harmony with nature.

Chapter II: Arcadian Ecology and Vergil

Having discussed the development of imperial ecology and its influence on the development and practices of modern cities, the question now follows regarding whether arcadian ecology influenced the development of ancient cities within the Roman Empire. This section will compare the realities of practice and literature within Rome to Worster's proposed arcadian ecology. In short, this section will answer the question of whether the Roman practices

⁴¹ Nietzsche, *The Gay Science*, 124.

and literature of the later republic and early empire formed a coherent worldview towards nature, as Worster suggests, and if this worldview follows the parameters of Worster's arcadian ecology. Based upon the practices of both urban and rural people withing the Roman empire, as well as the poetry of Vergil, it is clear that Romans during this period had a more complicated view of nature beyond a simplified description of Roman ecology as simply arcadian. While the Romans found divinity within nature and did at times see themselves embedded with nature when in the countryside, they did not necessarily feel themselves in harmony with nature, leading to some similar practices and thoughts to those found in modernity.

Part I: Urban Practices

The relationship between a Roman urban resident and nature is not simply a clear-cut division. Cities did in fact separate people from nature physically, but still at times residents of cities sought to bring nature into the city. The relationship between the city and nature, as well as the relationship between the city and the countryside, is thus more complicated than a simple division between the two. In some regards, cities founded as colonies were explicitly established as a tool of political control, setting up a colony of veterans to establish Roman civilization in a region perceived as barbarous and untamed. Among the earlier Roman colonists outside of Italy, L. Aemilius Paullus in Spain was influenced by Greek city-states and their colonies. ⁴² The founding philosophy behind some of these Greek colonies, as pointed out by Gregory Crane, was Protagorean thought. ⁴³ Protagoras' philosophy focuses on the primacy of humanity rather than divinity and supports the power of human beings over nature; this Protagorean view was the

⁴² Simon Esmonde Cleary, Ray Laurence, Gareth Sears, "The City in the Roman West," (Cambridge: Cambridge University Press, 2011), 33.

⁴³ Gregory Crane, "Creon and the 'Ode to Man' in Sophocles' Antigone," *Harvard Studies in Classical Philology* 92 (1989): 108–9, https://doi.org/10.2307/311354.

leading philosophy behind the attempted establishment of the colony Thurii in the 440s BCE. 44

Aemilius Paullus and future Roman colonists continued the legacy of Protagorean thinking. Even if not consciously, these colonies were set up as a force to bring order and civilization in opposition to wild nature. Thus, Roman cities were the sites of politics and Roman culture, which were found to be separate from nature, while the countryside, somewhat closer to nature, was a pre-political realm. 45

However, practices regarding the use of urban spaces demonstrate that urban Roman residents did not desire to be completely separate from nature. A Roman city had to utilize public monuments and spaces to encourage urban residents to remain in or move into the city to sustain its population. These public works were, like modern public works, supposed to improve the perceived quality of life for city residents and could include recreation spaces such as public gardens, bringing nature into the city and thereby serving an urban resident's desire for the natural world, which may be stifled by city life. ⁴⁶ This introduction of nature in urban space goes beyond gardens and into Roman art and wall painting. Pastoral landscapes were common depictions on Roman wall art, particularly in the private rooms of homes during the late republic. This popularity of pastoral imagery suggests a correlation between this style of pastoral art and the pastoral poetry being written by Vergil during this time. ⁴⁷ Timothy Saunders argues that ancient Roman wall art, particularly the "Second Style," was not simply intended to be viewed as a frozen pastoral scene, but instead a moment that was supposed to absorb the viewer. The

⁴⁴ This colony and Protagorean thought would have lasting influence, being written about by Herodotus and possibly being the inspiration to the "Ode to Man" in Sophocles' *Antigone*. Crane, "Creon and the 'Ode to Man'" 109-110.

⁴⁵ Cleary et al., "The City in the Roman West," 5.

⁴⁶ Cleary et al., "The City in the Roman West," 7.

⁴⁷ Mathilde Skoie, "City and Countryside in Vergil's *Eclogues*," in

City, Countryside, and the Spatial Organization of Value in Classical Antiquity, ed. Ralph Rosen and Ineke Sluiter (Leiden: Brill, 2006), 311.

viewer was not supposed to stand coldly by and view a frozen scene of a landscape, but instead was invited to be within the action that is taking place in the setting. ⁴⁸ Therefore, by placing these landscape paintings within homes, they become not simply decorations, but instead immersive experiences to transport the viewer to the natural world from home.

Lastly, monuments in Rome during the early empire utilize natural and pastoral imagery, as exemplified by the pastoral scenes and vegetal motifs of the Ara Pacis, which theoretically bring the countryside and nature into the city. 49 Natural imagery in the urban setting is a common theme in monumental structures during the reign of Augustus, including the Mausoleum of Augustus with its adornment by cypress trees. ⁵⁰ Plants and trees also were cultivated within the city not necessarily in gardens, but as sacred groves and trees that remained untouched, apparently since the founding of the city.⁵¹ However, the question still remains as to why a Roman may desire to bring natural imagery into the city. A potential reason would be the degree to which the city cut off residents from nature, making these gardens and art a replacement for the bucolic life. But paintings and gardens are not the real experience of nature. They are imitations of such things, such as boulevards with planted trees between roads, and this is clearly no equivalent to nature outside the city. These examples of nature in an urban space are cultivated in themselves, restricted sections of nature that are under human control. This comparison between modernity and antiquity is further problematic for arcadian ecology, suggesting ancient cities are not essentially different from modern ones in this regard.

 $^{^{48}}$ Timothy Saunders, "Landscape," in *Bucolic Ecology: Virgil's Eclogues and the Environmental Literary Tradition*, (London: Bloomsbury Publishing, 2008) EBSCOhost, 103-4.

⁴⁹ Skoie, "City and Countryside," 311.

⁵⁰ Fikret Yegül and Diana Favro, "Julio-Claudian Architecture in Rome," in *Roman Architecture and Urbanism:* From the Origins to Late Antiquity, (Cambridge: Cambridge University Press, 2019), Cambridge Books Online, 206

⁵¹ Rebecca Armstrong, *Vergil's Green Thoughts: Plants, Humans, and the Divine*, First edition (Oxford: Oxford University Press, 2019), 54.

The relationship between the city and its surrounding regions is quite different in the modern and the ancient cities, however. Cleary, Laurence and Sears reject Moses Finley's suggestion that ancient cities were consumerist like those of modernity, being the stopping point for most goods that enter them in the regional and global economy. They instead argue that Roman cities were more integrated into their local economies, with many goods and services flowing through cities, rather than simply being consumed by them. 52 This is further evident in the practices of local agricultural industries such as the system of seasonal workers, which will be treated in the next section. Also, Roman cities were not explicitly dependent on either global trade or local trade, but upon a blending of both, and often shifted their focus based on natural patterns. In Rome itself, trade was determined partly due to weather in the Mediterranean and its seasonal effects on the Tiber. For example, Rome would receive large shipments of grain from Egypt in July due to the harvest season there, and then rely on local crops throughout the rest of the summer, with fruits and vegetables harvested and brought to Rome during August largely by road and small ships due to the Tiber's water level being low in that time of year. 53 This relationship between Rome and the Tiber supports the idea of a city and its residents integrated within nature, working with it rather than against it.

Nature thus had a very real effect on the lives of the individual Roman as well as on cities in which they lived. This relationship contrasts with modernity, as evident in the previous chapter in the discussion of urban waste, where nature is understood as separate from the modern city. However, a Roman citizen could not have this understanding, as natural processes had a constant effect on their livelihood, determining what and if they would eat. This is of course not

⁵² Cleary et al., 7-8.

⁵³ Simon Malmberg, "Ships are Seen Gliding Swiftly along the Sacred Tiber," in *The Moving City*, edited by Ida Ostenberg, Simon Malmberg and Jonas Bjornebye, (London: Bloomsbury Publishing, 2015), 189-90.

to say that nature no longer affects modern humanity, but instead that the realities of food production and waste are so separated from modern individuals, they would be difficult to identify for the average individual in the modern day. This example raises an important issue within modernity, in which individuals are largely unaware of where their food came from with supply chains causing cities to be reliant on global trade rather than the local realities of nature.

The issue of human separation from nature is thoroughly tied to Roman religion, in which nature is filled with divinity and divine force, *numen*.⁵⁴ Thus, Romans were always keen to respect the forces of nature, as their livelihoods did depend on it. This prevalence of *numen* thus makes respect for nature, and not offending the gods within it, paramount to a Roman.⁵⁵ This respect for nature through *numen* made them more aware and cautious as to not harm the natural world, so as not to offend any deities. Certain trees or groves were often associated with specific gods or minor deities like nymphs, but Romans also feared the potential of upsetting unknown or unseen gods that held sway in particular places within nature.⁵⁶ Ironically, this made the Romans more aware of their impact on nature, as acting improperly and upsetting a deity could have unforeseen circumstances. Romans were thus aware that humans could have disastrous effects on their surrounding environment. Rebecca Armstrong even suggests that the famous phrase of Tacitus that Roman conquests lead to making a desert and calling it peace is not simply a clever phrase, but instead reflects the recognition that Roman armies had monumental effects on the environments they passed through.⁵⁷

⁵⁴ Alisa Hunt, "A Brief History of Tree Thinking: The Enduring Power of Animism," in *Reviving Roman Religions: Sacred Trees in the Roman World*, (Cambridge: Cambridge University Press, 2016) *Cambridge Books* Online, 60. ⁵⁵ Alisa Hunt, "Tree Thinking," 61-2.

⁵⁶ Armstrong, Vergil's Green Thoughts, 18-9.

⁵⁷ Armstrong, Vergil's Green Thoughts, 14.

In this first section, I have investigated two ways in which the practices and uses of space in Roman cities follow the concepts of arcadian ecology, and two ways in which they do not, indicating that the Romans of the late republic and early empire did not have a strict arcadian understanding of nature. Instead, there is an apparent tension between the desire to connect with nature and the separation from nature caused by the city. I will next investigate rural life in the late republic and early empire with the same questions in mind. Furthermore, if rural residents are found to be closer to and more embedded within nature, it follows that breaking down the dichotomy between city and country also shows how urban residents may also be embedded within nature.

Part II: Rural Practices

The main question that surrounds Roman farming practices regarding the relationship between humans and nature asks what the difference between "conquest" of nature and "cultivation" of it is. Roman agricultural practices thus range from outright war with nature, fighting against it for the sake of protecting crops and livestock, to careful cultivation and working with natural processes. The question of cultivation versus conquest can be better understood through the lens of the diversity of crops in the Roman farm. Though the staple crops of the typical farm were wheat, grapes and olives, Roman rural economies sustained great diversity beyond these three crops. ⁵⁸ A conquest of nature is apparent particularly in livestock farming, as pests and weather are common hazards. This is particularly the case for sheep, which were carefully managed and cared for with pens and housing due to their particular requirements regarding the weather. ⁵⁹ Bees also required vigilance to avoid disaster from weather, changing

⁵⁸ Helen Goodchild, "Agriculture and Environment of Republican Italy," in *A Companion to the Archaeology of the Roman Republic*, ed. Jane DeRose Evans, (Chichester: Wiley Blackwell, 2013), 207.

⁵⁹ David Hollander, Farmers and Agriculture in the Roman Economy, (Abingdon: Routledge, 2019), 34.

seasons, and pests such as moths and caterpillars.⁶⁰ However, other livestock practices imply more of a cultivation approach, as animals were a more efficient means of transporting agricultural wealth than simply selling the crop as is.⁶¹ This suggests that Roman farmers did not simply cultivate animals based on produce, but also upon ways animals can be naturally used for the farm's benefit. This is also apparent with the growth of some legumes, which would be utilized as fertilizer for some crops.⁶² With regard to careful cultivation, practices of grafting fruit and nut trees were common.⁶³ Some grain farms did not even require irrigation due to sufficient natural rainfall, as rainfall was more common in the Mediterranean climate at this time.⁶⁴ Despite this distinction between "war with nature" and cultivation of nature, both largely indicate the same fact that rural agricultural life was constantly dependent on nature and reactive to it, whether nature was a help or a hinderance. This is further emphasized by the fact that most agricultural writers are vague about their advice and instructions, since it is best for an agricultural worker to remain reactive to nature and flexible, rather than strictly adhere to processes.⁶⁵

Lastly, agricultural work was deeply tied to cities, further deconstructing the urban-rural divide. Goods, particularly milk and other products that spoil, often had to be sold quickly and locally within cities. ⁶⁶ Alongside goods was labor from cities, since many smaller farms utilized seasonal workers for parts of the year that required them, such as harvest seasons, rather than purchase and keep a year-round workforce. ⁶⁷

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⁶⁰ Hollander, Farmers and Agriculture, 71.

⁶¹ Goodchild, "Agriculture and Environment," 199.

⁶² Goodchild, "Agriculture and Environment," 204.

⁶³ Hollander, Farmers and Agriculture, 29.

⁶⁴ Goodchild, "Agriculture and Environment," 199.

⁶⁵ Hollander, Farmers and Agriculture, 21.

 $^{^{66}}$ Hollander, Farmers and Agriculture, 67.

⁶⁷ Hollander, Farmers and Agriculture, 76.

Beyond both the city and the countryside, religious ritual practices connected both communities. This is most apparent in the parade-like processions that occurred throughout the year, celebrating different gods and goddesses. These processions moved across the *pomerium*, the sacred boundary of Rome, indicating that religion did bind the urban realm to the rural realm. However, different ways in which processions crossed the *pomerium* reveal its significance for the division between inside and outside the city. Some processions, such as that of *Magna Mater*, did not pay much attention to the boundary. But the *transvectio equitum*, a procession celebrating Jupiter, Mars, and the Dioscuri, ritually left Mars outside of the *pomerium*, signifying that Mars had no place within the city. This careful detail demonstrates that the city was a place of order and peace, not chaos and war, paralleling the notions of cities bringing civilization to a region.

This view of cities and rural communities finds expression in Roman literature and culture. We may take as an example Vergil's *Eclogues* and *Georgics*. In light of these two examples, two questions arise: do the narratives relate to the practices I discussed and do the common narratives shared by both match the ideas of arcadian ecology? By answering these questions, I may then fully compare the ecological worldviews of both Roman antiquity and modernity.

Part III: Arcadian Ecology and Roman Narrative

Vergil's *Eclogues* and *Georgics* are much like the urban gardens and pastoral landscapes of cities. This poetry was written by an urbanite to be read by urbanites and, much like the urban

⁶⁸ Kristine Iara, "Moving In and Moving Out," in *The Moving City*, edited by Ida Ostenberg, Simon Malmberg and Jonas Bjornebye, (London: Bloomsbury Publishing, 2015), 189-90.

⁶⁹ Iara, "Moving In and Moving Out," 126.

⁷⁰ Iara, "Moving In and Moving Out," 132.

gardens, is not a perfect surrogate for the idealized rural life being described. Unfortunately, Roman ecology has no epoch-defining philosopher to explain the ecological paradigm of this period like modernity has with Descartes. But by reading Vergil's poetry alongside both urban and rural practices, a picture of the Romans' relationship with nature can be developed. Again, the popularity of this poetry and art suggests a desire for nature caused by a lack of contact with nature in cities.

There are further parallels between Vergil's poetry and certain modern poets such as Wordsworth, and even pastoral poetry directly inspired by Vergil by poets, like Alexander Pope. 71 However, this does not mean that Vergil is useless in this discussion and that he is exactly like these later poets, since a key difference remains. The modern counterparts to Vergil all fall into imperial ecological frameworks, because they all view humans as separate from nature. The early modern pastorals match the setting but lack the characters of Vergil's pastoral. Instead of contrasting the leisureliness celebrated in the poetry with the hard work and anxieties of pastoral life, the modern pastoralist's character reflects their own aristocratic upbringing, and the lack of this contrast separates their work from nature. 72 Vergil, on the other hand, still demonstrates an understanding of humanity within nature even if he himself is not living in the countryside. This presents a similar distinction seen with Roman urban practices. Though Vergil is fundamentally separate from nature, he still recognizes the actual work necessary outside of the city; nature still has a strong effect on his life, whereas the modern pastoralists only depict nature and the countryside as a setting, rather than a force in itself.

⁷¹ Most evident in his collection of poetry, *The Pastorals*.

⁷² Raymond Williams, "Pastoral and Counter-Pastoral" in *The Country and the City*, (New York: Oxford University Press, 1973), 17-8.

Vergil's depiction of rural life in his *Eclogues* combats the perception of a rural-urban divide in Roman society, and furthermore demonstrates how both pastoral life and even urban life are embedded within nature. Skoie explains that there are three types of countryside in the Roman world: the civilized countryside, which pertains to the farms described in the *Georgics*, the pastoral countryside, the setting of the *Eclogues*, and lastly the wilderness. These types of countryside exist on a spectrum going from most tamed nature to most untamed, with the pastoral setting being the crossroads between the wilderness and urban society. Throughout the *Eclogues*, characters are often described as either going to or coming from the city, revealing that the urban world is never quite absent from the rural world, and vice versa. This is further emphasized in the second *Eclogue*:

O tantum libeat mecum tibi sordida rura atque humilis habitare casas, et figere cervos, (Vergil *Eclogues* II.28-9)

"Oh it would bring you so much pleasure it might bring to you to live in the dirty fields and a lowly cottage, and to hunt deer..."⁷⁵

The reference to hunting in conjunction with the imagery of pastoral life throughout the poem connects the pastoral world to Corydon's addressee, Alexis in the city, and also to the wilderness, the realm of hunting.

The connection between Rome and the countryside is emphasized in $Eclogue\ I$, in which Tityrus describes Rome as:

Urbem, quam dicunt Romam, Meliboee, putavi stultus ego huic nostrae similem, quo saepe solemus pastores ovium teneros depellere fetus: sic canibus catulos similis, sic matribus haedos noram, sic parvis componere magna solebam:

⁷³ Skoie, "City and Countryside," 301.

⁷⁴ Skoie, "City and Countryside," 300.

⁷⁵ All translations are my own unless otherwise specified.

verum haec tantum alias inter caput extulit urbes, quantum lenta solent inter viburna cupressi. (Vergil *Eclogues* I.20-6)

I stupidly thought the city, which they call Rome, Meliboeus, was similar to this [villages] of ours, to which the shepherds are accustomed to often drive the gentle offspring of sheep:

Thus I knew a puppy was like a dog, a baby goat to its mother, thus I was in the habit to compare the great to the small:

But, this city lifts her head high among the other cities,

As great as a stretching cypress is accustomed among the shrubs.

Traditionally, these lines are interpreted to mean that Rome is so different from villages that it is not even of the same species, but Skoie points out that the flora metaphor implies there are still some similarities. Instead, she focuses on Rome being unique in itself rather than city life being so foreign and alien, as if Rome is simply a larger village, just as a dog is a larger puppy. ⁷⁶ This comparison is rejected in the poem as being too simplistic with a supposedly better metaphor, the comparison between cypress trees and shrubs, taking its place. Rome is similar to villages and the countryside like a cypress tree is similar to other plants, but a village could never grow into Rome just as a shrub could never grow into a cypress. They are similar, but not identical. Furthermore, this passage uses natural imagery to describe Rome as well, making it not necessarily something outside of nature, but something that has grown out of nature.

It must be noted that this is a common notion that the *Eclogues* in fact build a dichotomy between the city and country, but this is not the case. Some scholars have suggested this interpretation through the lens of Corydon in *Eclogue* 2, arguing that Corydon is not trying to convince Alexis of the virtues of rural life, but instead himself. With this interpretation, Corydon is essentially representing the conflict that Vergil faces, as Corydon himself is in fact urban

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⁷⁶ Skoie, "City and Countryside," 304-5.

rather than rustic.⁷⁷ Just as Corydon must exaggerate the pleasures of rustic life, so does Vergil. But Corydon's status as *urbanus* further breaks down the urban-rural divide, as these exaggerations are also paired with fears and anxieties of rural life. Thus, Vergil again is distinguished from the later Romance poets, as there is a more complicated view of the natural world beyond simple untouched nature, but Corydon must make a living.⁷⁸ Lastly, Corydon's ambiguous status as *urbanus* turned *rusticus* further shows the fluidity between the country and the city, as he fits squarely into neither category.

In the second eclogue, the character of Corydon demonstrates the interconnectedness between the city and country. Again, at face value, this poem seems to reinforce the rural-urban divide, with Corydon fretting that his gifts to Alexis are insufficient as his rural offerings are trash compared to the luxuries of the city. However, the poem quickly begins to reveal that Corydon is making fantastic exaggerations, writing:

mille meae Siculis errant in montibus agnae; lac mihi non aestate novum, non frigore defit (Vergil *Eclogues* II.21-2).

"I have a thousand lambs wandering in the mountains in Sicily Fresh milk is not lacking in the summer, nor in the winter."

This supposed abundance of Corydon's resources mirrors the abundance of the city, suggesting that the supposed leisure of the countryside is as much a falsehood as the leisure of the city, and that neither city life nor rural life is supreme.

The leisure and abundance of rural life sharply contrasts with the struggle and labor also depicted throughout the poem. This contrast further demonstrates the Roman understanding of

⁷⁷ Ricardo Apostol, "Urbanus Es, Corydon: Ecocritiquing Town and Country in Eclogue 2," *Vergilius* (1959-) 61 (2015): 3–28.

⁷⁸ Apostol, "Urbanus Es," 22.

reliance and interconnectedness with nature, as the struggle and abundance complement each other as much as they contrast. Thus, the abundance is seemingly built upon the labor and struggle. This is apparent in Eclogue I as Meliboeus laments:

Non equidem invideo; miror magis: undique totis usque adeo turbatur agris. En, ipse capellas protinus aeger ago; hanc etiam vix, Tityre, duco: hic inter densas corylos modo namque gemellos spem gregis, a, silice in nuda conixa reliquit (Vergil *Eclogues* I.11-14).

"Truly, I do not envy; but I wonder: when on all sides everything is disturbed even to the fields. See, I drive my goats, sick with worry; I hardly lead this one, Tityrus, that can go on: among these dense hazel trees in which she left twins."

Along similar lines, Corydon's claims at abundance are also contrasted by the hard work he is ignoring in *Eclogue* 2:

Semiputata tibi frondosa vitis in ulmo est; quin tu aliquid saltem potius, quorum indiget usus, viminibus mollique paras detexere iunco? (Vergil *Eclogues* II.70-2).

"Your vines on leafy elms are left half-pruned, [Corydon]. Why don't you prepare to weave with rush and soft twigs at least one of the things that practicality demands?" Again, this juxtaposition of labor and leisure highlights a Roman understanding that leisure is reliant on the labor in the countryside. However, the exact relationship this implies between humanity and nature remains unclear. Is it like the Cartesian notion that mastery and possession of nature shall bring leisure, or is it more an idea that working within nature shall bring about leisure, rather than the conquest implied by mastery? The Golden Age depicted in *Eclogue* IV and the *Georgics*, as well as the meticulous farming details of the latter, provide clearer answer to this question.

The fourth *Eclogue* describes a forthcoming Golden Age, in which the natural world produces all that is needed for life without labor and humans no longer need to toil. The poet writes:

Ipsae lacte domum referent distenta capellae ubera, nec magnos metuent armenta leones; ipsa tibi blandos fundent cunabula flores, occidet et serpens, et fallax herba veneni occidet, Assyrium volgo nascetur amomum. (Vergil *Eclogue* IV.21-5)

"These goats carry themselves back home with udders stretching out with milk, and the cattle herd do not fear the great lions; pleasant flowers scatter themselves from their cradle to you, and snakes all die, and the deceitful plants of venom die, the Assyrian spice will grow among the common people."

cedet et ipse mari vector, nec nautica pinus mutabit merces: omnis feret omnia tellus: non rastros patietur humus, non vinea falcem; robustus quoque iam tauris iuga solvet arator; nec varios discet mentiri lana colores (Vergil *Eclogue* IV.38-42)

"Sailors will retire themselves from the sea, and merchants will no longer move their pine ships: all land will supply for everyone: the soil will no longer endure the hoe, the vine will no longer suffer the knife; the strong plowman now frees his oxen from the yolk; and wool will not learn to imitate various colors."

These passages demonstrate two important aspects of the Roman conception of nature. First, because Vergil describes a future that has not yet come to pass, it therefore means that this description contrasts with his contemporary world. Second, it then also reveals what Vergil understands the human relationship to nature to be under the "ideal" conditions of the Golden Age. The lines specifically demonstrate that the most significant change in this Golden Age would be the relationship between humans and nature. In this age, humans will apparently no longer have to labor, thus ending the pleasure-pain dichotomy previously depicted in the *Eclogues*. Humans no longer must labor to make nature provide, as this will naturally occur. Therefore, there is a connection between human labor and production This is an ideal world of natural abundance and harmony, where humans are fully immersed in nature without labor. This unity within nature in an idealized future then implies that the humans are partially separated from nature in Vergil's contemporary world, but it is the natural order of things for them to be

so. This is also apparent in *Georgics* I, in which the Golden Age occurs in the past, and the natural order of harmony is disrupted by Saturn:

Ante Iovem nulli subigebant arva coloni; ne signare quidem aut partiri limite campum fas erat: in medium quaerebant ipsaque tellus omnia liberius nullo poscente ferebat. (Vergil *Georgics* I.125-8)

"Before Jove, no farmers subjugated the fields; It was against divine law to mark or partition the land with boundaries: the earth bore all in common to those who sought it, freely bearing all with no demand."

The fact that these lines suggest that settlers had not "subjugated the fields," clearly implies that later, during Vergil's time, the land would be subjugated, pointing to the mastery and possession of nature. Though it is clear that Vergil believes that humans naturally belong immersed in nature, it still remains uncertain whether he understood Romans to be "masters and possessors of nature." I will now investigate other sections of the *Georgics* that cause the meaning of this subjugation to be ambiguous, as they indicate that true mastery over nature is impossible.

Vergil's *Georgics* reflect the ambiguous relation of farm work to the natural world. Just as the role of the farmer can take the form of conflict or cooperation with nature, this is reflected in the text. The first poem describes the work of a farmer as a war on nature, describing the farmer as an ever-vigilant guard who must defend against pests, weeds, and other forces of nature in order for his farm to survive. There is a strong connection between the farmer and the soldier, since throughout the republic, men were often both, and both required strength and endurance. This connection reflects the role of cities previously discussed, where colonies of veterans were civilizing forces. Likewise, the farms established around these colonies would conquer nature as well. However, not all farmers are necessarily the same, as Vergil implies in

⁷⁹ Stephanie Nelson, "The Composition of the Georgics: Vergil's Farm," in *God and the Land: The Metaphysics of Farming in Hesiod and Vergil. Choice Reviews Online*, 87.

⁸⁰ Nelson, "Vergil's Farm," 89.

his first *Eclogue*. The farmer Meliboeus laments the loss of his farm and contrasts himself with a soldier replacing him. Meliboeus is the ideal farmer in terms of working with nature, following the rhythm of the world around him, in contrast to the soldier, who naturally treats the farm like a conqueror. This distinction implies that humans can have either a hostile or peaceful relationship with their farm work. Even so, Meliboeus' method is indicated to be more productive and the supposedly proper way of farming, as opposed to the brutal and heavy handed method of the soldier.

The farmer never successfully conquers nature in the *Georgics*. The fact that he must constantly struggle reveals that there is no true mastery and possession over nature in the Cartesian sense. Again, the farmer is not placed above nature, but within it. Though the *Georgics* describe a more hostile nature than the peaceful idyll of the *Eclogues*, nevertheless the *Georgics* portray humanity as even more immersed in the natural world. There is certainly violent imagery within the *Georgics*; this is particularly evident in the verses Anthony Bradley points out about controlling bee populations:

tu regibus alas eripe; non illis quisquam cunctantibus altum ire iter aut castris audebit vellere signa. (*Georgics* 4.106-108)

"You tear off the wings from the queens; no other bee will dare to pluck the standards from camp with them lingering stuck."

Though interpreted as violent by Anthony Bradley, this line demonstrates that agricultural work must use natural processes. There is no way to conquer and kill all the bees and still have their honey, and thus the farmer must use natural tools to control the bees.

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⁸¹ Armstrong, Vergil's Green Thoughts, 177.

Lastly, the *Georgics* portray nature itself not as simply something acted upon by humanity, but as something with agency and activity in its own right. Just as divinities exist in the landscapes of the *Eclogues*, the *Georgics* also show that nature is a living force in a more realistic manner. Nelson points to the birds of the first *Georgic* that happily chirp, explaining that they are not a metaphor, but nature simply existing in its own right. 82 There is thus a multiplicity of voices in the *Georgics*, with many aspects of nature having a voice, including the birds, but humanity as well, demonstrating that humans are a part of nature.

When considering the practices and literature of the late republic and early empire, the arcadian ecology of Worster somewhat successfully captures the worldview of the time. There are certainly aspects of humanity being part of nature rather than being separate from it as well as intrinsic value to nature, but it is not a perfect match and there are many exceptions. This understanding of nature thus was not universal, but it clearly was a noticeable force. It is certainly true that the Romans understood the natural state of humanity to be unified with nature, even if this was not the actual reality in which they lived, as even in antiquity, urban life separated humans from nature. Understanding Roman ecology beyond simple animism allows a more compelling look into antiquity, as the problems that the Romans faced were not wholly different than those of modernity. Furthermore, studying the ecological understandings of the past now allows us to critique the present and synthesize a new ecological narrative to fit the needs of modern society.

⁸² Nelson, "Vergil's Farm," 97.

Conclusion: A New Narrative

The arcadian narrative has the benefit of a worldview that is in harmony with nature, with its viewpoint on nature being divine and humans being completely within it. However, as pointed out by Nietzsche, this worldview actually has the problem of being too simplistic as it anthropomorphizes the world and views the world as a perfect harmony, unable to explain change. Thus, though it has the benefit of promising harmony with nature, the arcadian worldview is simply not viable to return to. This judgment is further supported by the fact that its successor, the imperial ecology, allows much greater freedom and potential in stark contrast to the arcadian's static harmony.

The imperial thus has the benefit of great and open potential. By destroying intrinsic meaning and value, the world is Nietzsche's open sea. However, this view has the dangers I enumerated previously, such as environmental destruction, the loss of values leading to feelings of uprootedness, and the destruction of communities. Therefore, the imperial ecology does open the way for new meanings to be found, but it cannot last forever without these negative effects.

Furthermore, understanding the ecology of antiquity better prepares us to utilize antiquity in the formation of a new narrative. Instead of treating antiquity as having a lost ecological narrative, impossible to truly recover, we may instead understand the complex reality of ancient ecology. We may better understand that the problems we face today are not entirely different from those of antiquity, and therefore the solutions of antiquity can have value. Also, this understanding opens the way for new readings of ancient literature in light of this nuanced understanding of ancient ecology. Beyond the poetry I have discussed, the "Ode to Man" in Sophocles' *Antigone* and Horace's *Satire* 2.6 are excellent examples.

Thus, a new narrative must be formulated. If we are to take the best from the arcadian and imperial, this new narrative must both give humanity some degree of freedom, but also allow humanity to be a part of nature. Following Nietzsche, a new understanding of nature that dedeifies it but also does not place humanity above nature may allow for both such things. Furthermore, this view must also be skeptical of understanding the world simply, and thus must be willing to accept change. In sum, I think a new viewpoint is needed, one that accepts humanity as a part of nature and not fundamentally above it and recognizes also that humanity does not have a complete understanding of the world, and thus is incapable of fully controlling it. With an open approach that recognizes human insufficiency, we can also add an understanding of ecosystems to give ourselves freedom and agency while recognizing that our actions have affects throughout the world. Though this is a very simple overview, this is the basis of what is required to tackle the problems we face today.

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