

Lecture 9: Intro to Environmental Humanities, *Early modern English literature and the emergence of truly modern environmental issues, such as urban air pollution. (environmental history)*

A) The Early Modern Period

- 1) In England the period from 1500-1700 is referred to either as the “Renaissance” or the “early modern” period. Although these two terms are often used interchangeably, they in fact represent two very different views of the period.
- 2) According to Petrarch, an early Italian Renaissance writer, in the thousand years between the collapse of the Roman Empire and his own time, there was nothing but “darkness and gloom.” Hence to him these were the “dark ages.”
- 3) “Renaissance,” which means to be born (*nascentia*) again, defines the period as a revival of classical learning, which brought light to this darkness by reviving the arts and sciences of antiquity, specifically of the Greeks and Romans.
- 4) Scholars today rarely use the term “dark ages,” as it deprecates the period of time between the Roman Empire and the Renaissance. In fact, by imagining the time before them as dark and backward, thinkers like Petrarch were able to epistemologically construct them-selves and their culture by negatively characterizing other cultures that came before them.
- 5) During the “dark ages,” it was not technologically possible to create engineering masterpieces such as Rome’s Pantheon (125 AD).
- 6) During the “Renaissance,” the technology to create such structures was “reborn” (*nascentia*). For example, the dome of St. Peter’s Basilica in Rome, which was designed by Michelangelo, is nearly as wide as that of the Pantheon, and even taller.
- 7) Not only was there a Renaissance in technology, but the arts were also “reborn.” The medieval period rarely produced works equivalent to those of the classical world, such as the Greek statue of Hermes with the infant Dionysus. However, Michelangelo’s David boldly, triumphantly declared that Renaissance artists had equaled, indeed perhaps surpassed, anything that had come before them.

B) England's Renaissance as the 'early modern' period

- 1) England’s Renaissance, which again occurred from roughly 1500-1700, is also often referred to as the “early modern” period. Unlike the phrase “dark ages,” which was coined in the 14th century, the term “early modern” is relatively

recent. In fact, “early modern” is a characterization that can only be made from the vantage point of a later period, modernity.

- 2) In calling this period “early modern,” we define it not in terms of the past, as “Renaissance” does (indeed, as a rebirth of the past), but rather in terms of the future, the early beginning of what will become modernity, our modern world. In short, the Renaissance resembles the past; the early modern the future.
- 3) For example, the printing press, which arrived in England in 1476, was entirely new, as nothing remotely like movable type existed in Western antiquity. In the year 2000, Time magazine named the printing press as the most important innovation of the millennium because it helped bring about an entirely new future. The printing press is an excellent icon of the “early modern” period, which we characterize, from the name forward, as bringing about future modernity, rather than resurrecting a classical past.
- 4) Not only was modernity presaged in technology during the early modern period, but also in various art forms.
- 5) Hieronymus Bosch’s *The Garden of Earthly Delights* (1503-04), for example, was unlike any painting that had ever come before it. *The Garden of Earthly Delights* is in many respects like 20th-century surrealist paintings, such as Salvador Dali’s *The Lugubrious Game* (1929). Unlike Michelangelo’s *David*, *The Garden of Earthly Delights* is more accurately characterized as an early modern than a Renaissance work.

C) London in the Early Modern Period

- 1) Environmentally, what was occurring in England from 1500-1700 was also in many respects unlike anything that had ever occurred on the planet before.
- 2) London, which was home to all of the early modern writers that we will be reading, has a strong claim on being, at least environmentally, the first truly modern city on the planet, as air pollution, acid rain, wetland loss, rampant consumerism, and similar issues became major problems from 1500-1700.
- 3) In part, these problems occurred because London experienced unprecedented population growth; by some estimates the population grew tenfold from 1500-1700. While throughout history other cities have grown quickly, London developed a host of what would become truly “modern” environmental problems early on. An example would be urban air pollution.

D) London’s Air Pollution

- 1) Because as much as 94% of England had been deforested by the 13th century, English had to increasingly look to other fuel sources. This was especially the case in cities, as their surroundings had been deforested long before.
- 2) As a result of this deforestation and the availability of cheap coal, known as "seacoal" (so called because it was shipped from the coast), many of London's industries, such as brewers, as well as its citizens, began switching from wood use to coal as early as the eleventh and twelfth centuries.
- 3) It was widely known, however, that seacoal not only created a great deal more smoke than wood, but that this smoke was particularly toxic. Consequently, in 1286 the first of many commissions was set up to study London's air-pollution problem; the first laws against its indiscriminate burning came in 1307.
- 4) Keep in mind that this was centuries before London experienced its meteoric population growth from 1500-1700. Consequently, from as early as 1286 it was clear that London was poised to have a major air-pollution problem.
- 5) London would likely have experienced major urban air pollution from the burning of coal in the 14th or 15th century, if it had not been for the bubonic plague, which entered England in 1348 and killed half of the population.
- 6) By the time Shakespeare was writing his plays (c. 1600), England's population reached its pre-plague level and the country was mining three to four times more coal than the rest of Europe combined, with most of it being burned in London. Hence, the scale of the problem was staggering.
- 7) Even at the time air pollution from seacoal was known to be responsible for the wholesale death of animals and fish (as acid rain deposited sulfur dioxide in waterways), the local extinction of entire species of plants, caustic erosion to buildings, as well as widespread respiratory disease among human beings.
- 8) By the time Milton was writing "Paradise Lost" (1667), widespread respiratory disease, caused by burning the highly sulfurous seacoal, was believed by the most celebrated statistician of the day to be second only to the Plague as the leading cause of human deaths in London. He was likely correct.
- 9) Although not coined until much later, the word "smog" enters the English language as a contraction specifically intended to describe the metrological condition whereby an amalgam of "smoke-fog" hung over London.

E) Literature and London's Air Pollution

- 1) Perhaps not surprisingly, London's air-pollution problem began showing up in literature, though in very surprising ways. For example, medieval and early modern depictions of Hell, as a place filled with the same sort of sulfurous smoke that was engulfing London, owe much to the city's air-pollution problem.
- 2) In countries that were not burning highly sulfurous coal, such as Italy, there are few such depictions of Hell. Dante's "Inferno", for example, contains none.
- 3) Moreover, even the choice of the word "brimstone" (brynstan, literally the "burning stone," coal) by the translators of the 1611 King James Bible for famous passages in Genesis and Revelation, was influenced by the translators' desire to make Hell seem as horrid as possible by describing it, like London, as choked with the sulfurous smoke of burning coal.
- 4) Furthermore, the depiction of Hell in Paradise Lost, as well as the mining operation that the devil's set up there, was directly influenced by London's air pollution, as was the protective hedge of trees circling Milton's Eden.

F) Environment and London's Air Pollution

- 1) London's air pollution is just one of many distinctly modern environmental problems that emerged in the "Renaissance." Starting in the early modern period, toxic waste, acid rain, rampant consumerism, and a host of similar issues will add a whole new dimension to traditional pastoral art.
- 2) Now more than ever, individuals and artists alike will cast their sight away from the city to an imagined simpler life in the countryside, one still largely untouched by these modern environmental problems. Consequently, in the early modern period pastoral would become exceptionally important, and be deployed more frequently than ever before.
- 3) As a result, pastoral's ability to draw attention to the environment (both pristine and endangered environments), by communicating environmental consciousness, will repeatedly be drawn upon by artists and poets. This is especially the case with Ben Jonson and his pastoral poem "To Penshurst."

G) London's Air Pollution (postscript)

- 1) London's air-pollution problem continued to grow and to make its appearance in artworks for centuries. For example, Claude Monet's "Houses of Parliament" impressionist series depicts London's air pollution in the year 1900.
- 2) However, London's worst bout with air pollution came in December of 1952, when over 4000 people died in one week from respiratory tract illness, with over

twice that many dying shortly thereafter. This tragedy helped spawn the modern environmental movement, as well as a number of clean-air legislations, including Clean Air Act 1956 - 650 years after London's first clean-air law.