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ECOLOGICAL THOUGHT, NOW AND THEN.

by

Jared Glenn Parkinson

Thesis submitted in partial fulfillment  
of the requirements for the degree

of

UNIVERSITY HONORS  
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In recent years a movement has surfaced which has greatly influenced many different aspects of society. This movement, referred to as the environmental movement, is supported by the central idea that humans are internally related to the environment and that humans have the ability to impair natural systems from being able to maintain themselves and evolve. Some activists in this movement believe that the earth is a living organism and that all objects have intrinsic worth. Environmentalists generally accept a more ecocentric view of the wilderness. This environmental movement is referred to by many different names including the ecological, green, wilderness, and naturalistic movement.

Persons who are part of this movement may place animals on the same moral level as humans and they tend to emphasize that the earth is a body of intermingling lives set in balance by 'natural' forces. Naturalists think in terms of biosphere (the entire world of biological organisms) and ecosystems (a complex system of interdependent life and natural processes). They condemn the rapid rate of extinction, consumption, and economic growth (Marshall 1992). They often have pantheistic or animalistic feelings, and in general have a reverence for life of any sort. Instead of an 'anthropocentric' focus, naturalists take a rather 'ecocentric' approach. Emphasizing the aesthetic qualities of nature, naturalists find beauty in noticing the complexities and spontaneity of nature. The environmental movement has been given momentum by scientific discoveries in ecology. Naturalists accept that the human race is responsible and somewhat accountable for their actions, and they urge society to move in directions which are more compatible with the environment.

The natural sciences have aided this movement in researching the dynamic and interrelatedness of nature with the study of ecology. Ecology is defined as the intermingling of all

aspects of life in an organic whole. The term *oekologie*, was first used by the German biologist Ernest Haeckel in 1866 as the study of animals and plant systems in relation to their environment. *Oekologie* is derived from the Greek terms *oikos*, meaning 'house' and *logos*, meaning 'knowledge'. Its derivative, ecology was given professional status in the 1930's as the study of the interdependence of different life forms. (Marshall 1992) The study of ecology has gone a long way in understanding the interdependence of life and natural systems. This has given scientific backing to the preservation of natural systems.

The paradigms supported by the current environmental movement are not new to history. Grounded in the lives of people who lived before recorded history, naturalistic thought is much older than mechanistic, or economic ideas. Although it is impossible to fully trace history back to where naturalistic thought first occurred some cultures have placed its origin at creation, with the beginning of time while other may believe it is a relatively new movement. In this section I will look at ancient and modern civilizations and their ideas on the relationship of human kind to nature. I will also try to highlight changes in history which have influenced our modern concept and value for wilderness. Because of our reliance on only recorded history and because recorded history is often limited in coverage, I am isolated to only a discussion about what has been recorded and its effects on the current wilderness movement.

In early Paleolithic times the people relied on hunting and gathering to survive. By considering what little history they left behind, mainly in the form of cave drawings, it seems to many historians that these people had much respect for nature (Oelschlaeger 1991). The early hunters and gatherers spent much time paying respect for their kill with the idea that it will enable the animal to reunite fully after death and insure a good relationship between the hunter and the



hunted. Most of the cave art depicts human interaction with animals and the environment. In order to survive, early people had to understand the natural flow of nature. The early people related nature to a mother who nurtured the human race (Oelschlaeger 1991). The modern view that Paleolithic people desired civilized life and a control over nature is not supported (Oelschlaeger 1991). Harmony with nature was a guiding principle for early hunters and gatherers and wilderness was considered home to the people and needed resources (Oelschlaeger 1991). The early American Indians have been used by many naturalists as an example of a civilization which used hunting and gathering to survive while believing they were one with nature.

**American Indians.** Indian tribes which roamed North America did not see nature as being in their control. They saw the use of nature as an opportunity provided to them by the Gods. The lives of the Native Americans were directly tied to the land for survival. Each tribal member participated in gathering and hunting to provide food and shelter. Many Indian tribes moved with the seasons or followed migrating herds in order to keep up supplies. As a result of their close connection to nature, their religious beliefs involve wild animals representing attributes of the Gods. Their songs are concerned with the natural flow of nature as illustrated in the wind, water, changing seasons, and moving animal herds. Native American art is decorated with animals, plants, mountains, and the human connection with nature.

Although Native Americans were closely connected with nature, they also used the environment, often causing irreparable harm. Modern historians have found that Native American tribes burned large tracts of forest, over-harvested resources, and irrigated land until it was too

saline to support crops (Maugh 1994). Although some Indian tribes were destructive to the environment, most demonstrated a considerable amount of reverence for nature. In describing the ways of nature and the conquest of White man, Chief Seattle said in a declaration to the President of the United States in 1854:

This we know: the earth does not belong to man; man belongs to the earth. This we know. All things are connected, like the blood which unites one family. All things are connected. Whatever befalls the earth befalls the sons of the earth. Man did not weave the web of life; he is merely a strand in it. Whatever he does to the web, he does to himself...

This understanding of the interrelatedness of the earth is identical to the thought of current naturalists and scientists learning about ecosystem dynamics. The Native American culture has been a strong foundation for modern environmentalists and naturalists. The ideas that man is an inseparable part of nature as presented by Indians, have become basic tenants to modern naturalist movements.

With the agricultural revolution came a change in life for hunters and gatherers. Agriculture allowed the people to remain more stable in one area and supplied for a population increase. People began to get a feeling of ownership of the land and their understanding of how to control nature increased (Oelschlaeger 1991). Early farmers depended heavily on nature and the seasonal floods to grow crops. Many of the myths held by early agriculturalists focused on a worship of nature and the changing element in nature. The agriculturalists shifted the paradigm accepted by hunters and gatherers by introducing an element of human ownership and dominion over life, especially plants. Some of the most ecologically based beliefs among early agricultural civilizations were found in Taoism, Hinduism, Buddhism, and ancient Egyptian's beliefs.

**Taoism.** China in the sixth century B.C. was passing through a time of much turmoil as the empire was dividing into warring states. The Taoists of this time taught that all should live in spontaneous harmony with nature. Taoist's emphasis on nature and freedom was in contrast to the Confucians emphasis on man, society, and authority. This difference in world views is still debated today.

Ideas of nature supported by Taoism are based on the ancient Chinese principles of *yin* and *yang*, two opposite but complementary forces in nature. When put together, they form *ch'i*, the matter-energy which forms all things. The feminine power, characterized by darkness, coldness, and passivity are represented by *yin* while *yang* represents the masculine power, characterized by heat, light, and activity. All things, including men and women, have both *yin* and *yang* within. (Marshall 1992)

One cannot define the Tao because it represents the 'natural flow' of things. Of the Tao's relation to creation (referred to as 'the ten thousand things'), it was written by Lao Tsu, in *Tao Te Ching*, that:

The great Tao flows everywhere, both to the left and the right.  
The ten thousand things depend on it; it hold nothing back.  
It fulfills its purpose silently and makes no claim.  
It nourishes the ten thousand things,  
And yet is not their lord.

To follow Tao, one must follow spontaneous self-realizations. Taoists have a holistic view of nature and recognize that balance is maintained through diversity, just as the *yin* and *yang* are balanced through their differences. Nature is also viewed by Taoists as being spontaneous and self-sufficient, therefore followers of the Tao believe that nature was not created. In search for a greater understanding of nature, Taoists just contemplate it, avoiding any preconceived notion,

trying to 'flow' with the natural 'waves' of the Tao.(Marshall 1992)

Followers of the Tao also lead their own lives in as 'natural' a manner as possible. They distance themselves from strong desires, competition, strife, or other tendencies which are not 'naturally' encountered. Taoists teach that government should be replaced by individual cooperation with each other, for they believe environmental disasters are a result of human dominion over each other and 'nature'. Taoism lays a strong foundation for the current libertarian ecological thought.(Marshall 1992)

**Hinduism** Hinduism is based in the importance and reality of diversity among all of creation. Lacking any formal organization or governing body, Hinduism is similar to a tree, with each branch representing an attribute and a God. Hindu's believe in an Absolute, or one God which has several different manifestations and illustrate different parts of the one Absolute. As written in the Rigveda, "He is one, [though] wise men call Him by different names." Followers of Hinduism believe largely in reincarnation that allows people to die and become alive again as a human or any other form of life. For this reason, Hindu's have much respect for animals, placing them on the same moral standing as humans. Often seen as more a culture, than a religion, Hinduism is based on the idea that all is One. They don't separate between man, animal, plant, or God. The Sanskrit phrase *Tat twam asi* or 'Thou art that.' is a common saying among current Hindus (Marshall 1992).

Depending on the *karma* which you develop through good deeds in life, at death you either move toward or away from joining the Absolute and finishing the cycle of life. Hindus travel to rivers to worship because they feel they represents life without end and a source of

spiritual support. Also, water was the element that brought life to the soil.

In India, the cow is the living symbol of Mother Earth. It is an act of worship to feed or milk the cow. The cow shows the people the greatness of Mother Earth in providing for their needs. The *Upanishads* wrote that Brahman created the earth and everything in it. They also taught that each individual is one with the Brahman along with every part of the world. This overall unity is expressed in the syllable used during meditation, *Om*. It is thought to be the voice of the earth.

Om! - This syllable is the whole world.

Its further explanation is:-

The past, the present, the future - everything is just the word Om. (Mandukya)

Different Hindu sects are branches off the tree of Hinduism. Each one stresses an important element of Hindu thought. The Bauls of Bengal taught free thought and individual action. Avoiding written doctrine, they kept their beliefs alive through stories and song. Vendantists teach a strict 'oneness' and teach against the dualism between mind and body. The most naturalistic sect of Hinduism is the Jains who rejected the caste system and tried to perfect their life to achieve the ultimate end (*moksha*) (Marshall 1992). The Jains were so adamant in placing animals on an equal level as humans that they established many hospitals for animals and swept the ground before stepping in order to avoid injury to flies. They considered the killing of any animal as bad *karma* (Marshall 1992).

The ideas of oneness and interdependency of parts illustrated by Hinduism is very similar to current understanding in ecology. Its rejection of dualism and equal consideration between humans, plant, and animals, has offered a valued framework for the current animal rights and naturalistic thinkers.

**Buddhism** Another prominent eastern belief which has influenced the current ecological movement is Buddhism. The Buddha or 'enlightened one' is thought to be a man who was born around 568 BC at the foot of the Himalayas (Marshall 1992). Rejecting all worldly things, the Buddha left his home and to live in the forest for six years. He then wandered and meditated until he eventually obtained enlightenment. He taught that the only way to escape the cycle of rebirth was to overcome one's self and remove all desires. As one unites themselves with the Universal Whole, they can enter a state of *nirvana* or 'nothingness' (Marshall 1992)

Buddhism taught against the caste system and any separation between man-nature, God-world, man-animal, and mind-body. Buddhist teachers in the "Consciousness-Only School" emphasized the doctrine that 'you reap what you sow'. The most ecological schools of Buddhist thought was Zen Buddhism. Similar to Taoism, Zen Buddhists sought enlightenment through emphasis on the 'natural' flow of things. By personally realizing 'One in all and all in One.' a Buddhist can reach enlightenment while still in the body. Naturalness and spontaneity are central parts of Zen, allowing creation to move with the 'flow' of nature.

Buddhism provides fuel to the green movement by uniting man with nature and encouraging people to let nature and creation flow. The idea that a communion with nature can provide deeper spiritual consciousness, as done by Buddha, is a basic element to many modern activists who seek conservation of wilderness. Buddhism emphasizes the beauty as found in nature and the harmony in which nature works. It stresses an equality among life of all forms and passes on the need to recognize and work with nature in order to become one with it.

**Ancient Egypt.** Very little is known about the early farmers in ancient Egypt. In an article by Thomas H. Maugh II, *Plunder of Earth Began With Man*, he wrote that some early Egyptian and Mesopotamian cultures experienced extreme famine and destruction due to environmental degradation and poor agricultural practices. One thing is known for certain, the Egyptians believed in the afterlife and the importance of pleasing the Gods. Closely linked with the flow of the Nile and its yearly flood, many Egyptian believed that the universe emerged from water. (Marshall 1992) Egyptian also viewed 'harmony' as the law by which nature acts. Similar to the Taoist 'flow' of nature, Egyptians felt every natural ill could be cured by 'harmony' (Marshall 1992).

The Ancient Egyptians delighted in the presence of animals. They often felt animals symbolized the Gods and were possessed with Godly powers, depicting animals with great detail in their art (Marshall 1992). The Book of the Dead, an Egyptian guide for the dead, devotes twelve chapters to describe how one can transform into an animal after death. In the form of a bennu bird (phoenix), an Egyptian can become part of the "soul of Ra" (Budge 1987). The early Egyptians worshiped and revered nature and its elements.

As hunters and gatherers changed to more agriculturalist lifestyles they started to humanize nature. By using nature to increase the population, people slowly began to change their world view allowing a more central role to human existence and placing nature on the periphery as a support to mankind (Oeschlaeger 1991). The most extreme change from paradigms which place nature as the focus to ones which place humankind in the focus occurred in the Mediterranean region among early Greek, Muslim, and Judeo-Christian civilizations (Oeschlaeger 1991).



**Greece.** The Greeks attributed different parts of the world to different gods. Each God played their particular role in the operations of the world. The earth was often depicted as a Goddess in Greek myth, referred to as Gaia in some cults. Other cults, like those worshipping Pan, centered around fertility since survival was conditioned on the ability to make animals and crops reproduce (Marshall 1992).

Most pre-Socratic philosophers believed in and sought to explain principles that governed the whole world, or 'principles of nature'. Thales believed everything was made of and would eventually dissolve back to water. His successor, Anaximander believed that everything originated from air (Robson 1995). Looking more to the nature of things instead of a common substance, Heraclitus felt similar to early Taoists in believing that change or flux is the principle behind nature. Focusing on fire because of its ever-changing quality, Heraclitus believed all things were created from fire. Heraclitus wrote that "All things come out of the one, and the one out of all things." and believed that a balance is produced when opposites are brought together. Such a balance holds everything in place. Parmenides removed the idea that opposites exist and presented the belief that everything is 'one'. He could find no division between things because he found no way to compensate for the 'nothingness' that would exist between objects if they were divided (Robson 1995).

Similar to Hinduism, Pythagoras believed in a wheel or cycle of life. In order to escape this wheel, one must indulge in scientific discovery (Marshall 1992). Pythagoras indulged in Mathematics and laid the foundation for later thinkers like Galileo who tried to reduce all things to numbers and mechanics, initiating the scientific revolution.

Democritus believed that everything is made up of tiny particles or atoms, which produced



the sensation of taste, heat, shape, and other physical properties in the way they interacted. The atoms were in constant motion, indestructible and infinite in number (Robson 1995) It was this idea, presented again by John Dalton, which made chemistry a science in the eighteenth century.

Socrates and Plato furthered investigations of earlier philosophers. They had a significant impact on the way future people would consider the relationship between humans and the natural world. By emphasizing the rationality of the human mind and separating mind from body, Socrates and Plato separated humanity from nature and supported the notion that man was a central focus in the purpose of life.

Plato most greatly influenced the Western world in his separation of *being* and *becoming*. The world of *being* contains logic and mathematics and other studies which have the potential of producing concrete knowledge. The objects of our senses belong in the world of *becoming* and cannot provide a firm foundation for knowledge. Western philosophers and scientists took this view and used it to separate man from animals because man is able to grasp a part of the world of *being* and animals cannot. Westerners also used Plato's ideas to spark investigations into 'higher laws' that can be used to understand nature (Marshall 1992).

Aristotle advanced Plato's ideas and further separated 'rational man' from living beings which lack rationale. Aristotle also prescribed an anthropocentric view by writing that plants exist for animals and animals exist for man. He wrote, "Since nature makes nothing purposeless or in vain, it is undeniably true that she has made all animals for the sake of man."

Plato did not totally remove himself from traditional Greek ideas on creation. Plato wrote in the *Timaeus*:

[The creator made] this world a single complete whole, consisting of parts that are wholes, and subject neither to age nor disease. The shape he gave it was suitable to its nature. A suitable shape for a living being that was to contain within itself all living beings would be a figure that contains all possible figures within itself. Therefore he turned it into a rounded spherical shape... And he put sound in the center and diffused it through the whole and enclosed the body in it. So he established a single spherical universe in circular motion, alone but because of its excellence needing no company other than itself, and satisfied to be its own acquaintance and friend. His creation, then, for all these reasons, was a blessed god.

This dialogue was probably the foundation for the idea stressed by James Lovelock when he highlighted the Gaia hypothesis in the early 1970's. The belief that the earth is a living being has become a central theme of modern naturalists.

### **Judeo-Christianity**

Both Judaism and Christianity had their ecological root planted in Genesis, chapter 1, which reads:

And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.

So God created man in his own image, in the image of God created he him; male and female created he them.

And God blesses them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living things that moveth upon the earth.

These sentences dictated to Jews and Christians their role in nature. Man was given the charge to "subdue" and have "dominion" over the earth and everything in it. This was part of Adam's commandment after 'falling' from the Garden of Eden. After Adam, many of the prophets mentioned in the Bible were herdsmen, farmers, or fishermen, using animals or the land to survive.

Some historians have tried to use Biblical interpretation to show that Christian doctrine allowed and caused the needless exploitation of nature. In the article, *The Historical Root of Our*

*Ecological Crisis*, Lynn White writes, "Christianity made it possible to exploit nature in a mood of indifference to the feelings of natural objects." By removing the 'guardian spirits' which guarded plants and trees, White wrote that Christianity took away the guilt from exploiting nature. White also writes that Christianity gave science reason to continue investigations, thus furthering the scientific revolution. Toward the end of his article, White offers a solution. "Hence we shall continue to have a worsening ecological crisis until we reject the Christian axiom that nature has no reason for existence save to serve man." (White 1967)

The arguments defended by White which trace exploitative tendencies back to Christianity, was supported by Marshall, although Marshall wouldn't go as far as White in recommending a rejection of basic Christian beliefs in order to solve the ecological crisis. Max Oelschlaeger countered White in his book *The Idea of Wilderness*. He wrote that the Bible allows many different interpretations to be used and points out several apparent inconsistencies concerning the idea of wilderness found in the Bible. He writes that the 'dominion' given to Adam was not a permit to exploit, but more a command to use wisely or have stewardship over nature. Oelschlaeger accepts White's idea that Christianity had an influence on the West by furthering a religion that is basically anthropocentric, but that full blame on the ecological crisis cannot be placed on one civilization (Oeschlaeger 1991).

Some early Christians provided modern naturalists direction through their teachings and writings. St. Francis of Assisi wrote, "Praise be my Lord, for our sister, Mother Earth." He considered all forms of life to be part of the 'fellowship of God' and went to great efforts to avoid harming animals. St. Francis wanted people to feed their animals extra well on Christmas day (Marshall 1992). St. Bonaventure, a disciple of St. Francis, wrote often of St. Francis's love for

nature. St. Bonaventure also wrote that nature is an indication of God's glory and should be used to move closer to God. He writes, "Whoever is not enlightened by such splendor of created things is blind for every creature is by its nature a kind of effigy and likeness of the eternal wisdom."

Despite modern efforts to move Christianity toward a more ecological stand, the basis for Christianity is the idea God created the world and all things in it. Man was created in God's image and is different from animal. Earth is a fallen place and Heaven is the desired home of all. Humans are to rule over God's earth until the fulfillment of God's plan. These beliefs imply a transcendent God and a 'spiritual' law that is separate from this earth. This anthropocentric view has contributed to current ideas that man has a right given by God to use, control, and understand nature.

**Islam** Similar to Christianity, Islam is also strictly monotheistic, worshiping only Allah which means 'the One' in Arabic. Muslims believe that behind nature and the creation, God follows general laws which are available to human understanding. In order to achieve this understanding, Muslims try to 'realize' the subject they are studying but don't separate the observer from the observed as much as Western thinkers do (Marshall 1992).

Islam is also very anthropocentric. It is believed that the earth was created for man and that man is in a privileged position to establish a closer relationship to Allah. Man is also further along the Ladder of Being which ends by becoming one with God than animals are. Muslims have generally lived in arid regions where control of nature is essential to survival. It is taught that man has control over women and nature. By using this control wisely, man may progress closer to

God (Marshall 1992).

Islam has had a similar influence on the ecological movement as Christianity. They are both very anthropogenic and monotheistic. They condemn the worship God's creation or nature as being contrary to the will of God. Animals were created for the use of humans and are not placed on the same moral scale as humans are. Wilderness was seen by Muslims and Christians as a place untamed by man filled with animals who have escaped man's control (Marshall 1992).

**Modernism.** The ideas and religions of the Mediterranean set the stage for upcoming revolutions by showing humans and especially scientists that nature could be understood and creating an idea of nature referred to as Modernism.

First scientists and philosophers, then all mankind began to dismiss the idea that nature followed an unidentifiable mystical flow, which only the Gods knew. Various revolutions helped man realize nature's ability to be understood and exploited for the good of mankind. The Renaissance fueled thoughts of a secular society, governed independent of the Church (Oelschlaeger 1991). During this time and the Reformation, economics began to grow, placing higher demand on natural products and a rationalization for using large quantities of natural products.(Oelschlaeger 1991) Over time people were more removed from nature causing people to create various superstitions about what existed in the 'unknown wild'. The common people believed wilderness was a place enchanted with demons and the unknown

The Scientific Revolution, attributed to the inquiries of Galileo and other courageous scientists began to usher in an era of realization that nature operates under mechanical laws. In the early years, scientists avoided the Church when exploring nature because the Catholic Church

felt natural inquiry was sacrilegious. However, as time passed and scientific discoveries began to develop, the Church slowly accepted the value behind the scientific revolution (Oelschlaeger 1991).

Several philosophers like Thomas Hobbes and Rene Descartes, furthered the scientists inquiries and applied mechanic applications to patterns and laws dictating human thought and knowledge. Hobbes was especially influential in showing a mechanical, causal relationship in every element of human action. Along with the Scientific Revolution, these philosophers began the process of making nature accessible and understandable to humankind.

The separation of humankind from nature began long ago with the advent of civilization and agriculture. Pre-Socratic philosophers made nature an object of intellectual inquiry. Plato and Socrates separated the human mind from nature, allowing a transcendent philosophy to be accepted. Nature was desacralized and man was shown their place as God's 'loved' creation by Judeo-Christianity and Islam. The Renaissance and the Reformation inspired men to criticize the current political, economic, and cultural systems, setting the stage for the Scientific Revolution. The Scientific Revolution shifted the idea of wilderness from an organismic perspective to a mechanistic one. Galileo was followed by logician's like Bacon, and philosophers like Descartes and Hobbes, causing the intellectual world to consider Wilderness a 'machine' which could be understood with scientific investigation. The idea of nature was created by these movements and is referred to as Modernism. Humans felt they had no natural limits and wilderness loss all its spirituality. The industrial revolution and the green revolution allowed increased of consumption and population growth. Wilderness was given a price tag and turned into a commodity.

Modernism is currently a dominant idea among Western civilization, epitomizing man's



divorce from nature. Oeschlaeger writes, "Modernism draws, perhaps unconsciously but absolutely, a boundary between an objective or scientific and poetic or aesthetic view of nature."

Criticism of Modernism came first from within three different fields, science, philosophy, and literature between 1650 and 1900 (Oeschlaeger 1991). Although no dominant opposing paradigm was adopted, the critics generally believed in a opposition between the ideas of nature-as-a-machine and nature-as-an-organism.

Within science, Darwin posed great difficulty for Modernism by presenting a theory which detailed a dynamic nature and essential interrelatedness. Darwin is said to have influenced ecology more than any other. By presenting natural selection and individual struggle for existence, Darwin had caught hold of a 'natural law' that could be used to understand all of nature. Ecologists after Darwin began to look at nature in a different light, considering the competition that exists between different species and the results of this competition. Ideas of extinction, range of tolerance, and dynamic species were given concrete foundations in Darwin's theories of evolution. Ecology in turn has influenced the naturalists movement by opening up a new perspective on nature. Naturalists could see the direct results of the competition between human species and other species. Species populations were measured and rates of extinction are determined, presenting a crisis for naturalists who value species diversity. Ecologists identified habitat as a crucial element in a species existence, causing naturalists to value large tracts of land along with the species in which they lived.

Darwin also presented scientific theory which destroyed the ideas that man was 'unique' and special in nature. By showing a way in which man evolved from a lesser animal, Darwin gives scientific standing to those who desire to place animals on the same moral standing as man. Man

was shown to merely be an advanced animal.

Philosophers like Spinoza, Hegel, and later, Schopenhauer and Nietzsche, criticized Modernism by attacking its basic assumption---that mind and matter are metaphysically distinct, that the whole of nature equaled the sum of its parts, that all relations are external, and that causation explains all natural motion (Oelschlaeger 1991).

Romanticists criticized Modernism through literature and poetry. The Romantics, "... followed a direct intuitive path to a realization of the unity of nature." (Oeschlaeger 1991: 113) Pre-cursed by Kant and Coleridge, William Wordsworth discovered deity through a wilderness experience and by portraying his feelings in his writings, he brought society closer to a spiritual awareness of wilderness. One poem by Wordsworth goes as follows:

One impulse from the vernal wood  
Will tell you more of man,  
Of moral evil and of good,  
Than all the sages can.

**Green Visions.** Various writers, scholars, and scientists have responded to Modernism with support and criticism. Of those who responded to Modernism, three activists stand above the rest as having the greatest amount of influence in suggesting and ushering in the current idea of wilderness. The first and greatest influence came from the writings of Henry David Thoreau. Under the influence of Thoreau, John Muir and Aldo Leopold also used their writings along with political activism and lectures to forward an environmental ethic which has been integrated into the fundamental beliefs of current naturalists and wilderness advocates.

Henry David Thoreau is probably the most quoted naturalist writer in history. Thoreau's writings openly discuss questions of what is considered humankind, nature, and what makes up



the relationship between humans and nature. Using transcendental ideas presented by Ralph Waldo Emerson, Thoreau extended transcendental ideas to a question of relations and connections in the environment. Drawing upon firsthand experience with nature, Thoreau searched for an understanding in nature that could go beyond scientific inquiry to a more 'spiritual' plain.

While reading Thoreau, one feels they are walking alongside him in nature, understanding the bond with nature and the full glory of the earth. Thoreau inspires within the reader an inner inquiry into the feeling and thought one feels while in nature under deep contemplation. Thoreau was able to bring nature into the homes of a growing civilization which was far removed from wilderness.

Growing up on a farm in Wisconsin, John Muir spent his childhood cultivating a respect and fascination for the land and each of its elements. Understood as a man with many hats, Muir was a wilderness trekker, a scientific observer, a writer, a philosopher, and a passionate conservationist. Throughout his life, Muir shifted from an anthropocentric view to a biocentric view. He altered his idea of God as established in a background of orthodox Christianity, to form a pantheistic view, believing God is the process and entirety of creation. According to Muir, nature itself was divine and sacred. Muir wrote in *Wilderness World*, "The clearest way into the Universe is through a forest wilderness." These changes in perception began to take shape after Muir experienced rebirth in the wilderness, in which he realized the glory of nature while looking at a wild flower.

Never really considering himself a philosopher, Muir's writings avoid deep philosophical investigations, focusing more on empirical signs of nature's wonder. He writes, "One day's

exposure to mountains is better than cartloads of books." Muir was fascinated and gloried in a dynamic environment. In his essay, *My First Summer*, Muir writes,

Contemplating the lace-like fabric of streams outspread over the mountains, we are reminded that everything is flowing--going somewhere, animals and so-called lifeless rocks as well as water.... Rocks flow from volcanoes like water from springs, and animals flock together and flow in currents modified by stepping, leaping, gliding, flying, swimming, etc. While the stars go streaming through space pulsed on and on forever like blood globules in Nature's warm heart.

Especially in recent years, Muir has had considerable influence on society. Inspired by his love for the Sierra mountain range, Muir founded the Sierra Club, which is one of the largest and most influential environmental interest groups today. By combining theism and naturalism into one philosophy, Muir joins Thoreau by directing a society founded in theism toward a more naturalistic ethic. Although ecology was not yet accepted by the academic world, Muir emphasized the ecological perspective in his writings. Muir's writings have gained great success in recent years because they show society a simple ecological understanding.

Aldo Leopold was the third giant of wilderness philosophy. Trained in forestry at Yale University, Leopold gained an understanding of wilderness by combining intellectual learning and personal experience in nature. Leopold researched and lamented over the environmental damage which was occurring as a result of exploitation in the name of the 'all mighty dollar'. Leopold wrote in the forward to *Sand County Almanac*, "Like winds and sunsets, wild things were taken for granted until progress began to do away with them. Now we face the question whether a still higher 'standard of living' is worth its cost in things natural, wild, free."

The goal of Leopold's inquiry was to establish a land ethic which was conducive to the natural world and man. He attempted to synthesize three rival perspectives: the ecological,

ethical, and aesthetic and bridge the impasse between science and ethics through intuition (Oeschlaeger 1991).

Leopold was educated in Modernistic ideas which reduced nature to its parts and investigated the mechanisms of natural process. Moving toward a more organismic ecology, Leopold tried to establish and explain the connection between humans and nature. He noticed that human action often caused instability in the environment, but felt humans were related internally to nature. Leopold was one of the first to question the association between diversity and stability (Oeschlaeger 1991) In *The Sand County Almanac*, Leopold wrote that any decision is "...right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise."

Along with Thoreau, Muir, and Leopold many other naturalists have enhanced wilderness ideas by refining the environmental ethic and getting society and the political arena to notice the environment.

Albert Sweitzer was a Christian who developed an environmental ethic centered around the fact that all of God's creation should be loved. He felt that all life had intrinsic value and should only be killed in necessity to preserve another life. Although naturalists have taken different boundaries concerning what justifies taking of life, Sweitzer aided in developing an ethic on the intrinsic value of life which has been a essential element to the naturalistic movement.(Marshall 1992)

*Silent Spring*, by Rachel Carson awoke the American public to the serious cumulative and long term impacts of our use of the environment. She highlighted the serious effects of pesticides on bird populations. Published in 1962, Carson's book started a public outcry for more

government regulation which would not slow until well into the 1980's.

Alfred N. Whitehead rejected the mechanized ways of Hobbes and Descartes in favor of an understanding which allowed for the whole of the world. He noticed the interrelatedness of nature and developed a philosophy which is similar to Taoism in its acceptance of a natural flow which encompasses all things. Each person is part of the One flow of nature which is life and is driven by Eternal Laws and created by an Eternal God. He encouraged scientists to study the whole instead of the parts, believing the whole to be better than the parts. Whitehead rejected the mind-body, inorganic-organic, man-animal-plant separations. (Marshall 1992)

**A Diversity of Wilderness Ideas.** Noticed in any public discussion concerning wilderness preservation, current thoughts concerning nature and wilderness are diverse, and numerous. In this concluding section I will attempt to identify some of the current movements and thoughts which are influencing societies idea of wilderness. As with nature, these ideas are changing constantly and being redefined as generations change and new perspectives are formed.

The homocentrism of Judeo-Christianity, along with an ideal of conservation has combined with the perspectives of Modernism to form a movement referred to as resourcism. Oelschlaeger lists the basic ideas of conservationism in his book *The Idea of Wilderness*. These are:

- "RESOURCE CONSERVATIONISTS believe that
- natural systems are no more than collections of parts
- Homo sapiens is related externally the ecomachine
- the ecomachine can be engineered to produce desired outcomes and prevent undesired consequences
- the market objectively determines the worth and value of all things, cultural and natural
- the national and per capita income accounts are the ideal measure of societal well-being
- progress can be determined according to the utilitarian formula of the greatest good for the greatest number" (Oelschlaeger 1991:287, Table 4)

Resourcism views wilderness as a "stockpile of matter-energy" waiting to be transformed by technology into something useful for man (Oelschlaeger 1991). The economic market determines when and at what rate natural resources should be used. Maintaining an anthropocentric view of the world, Resourcists advocate conservation in an effort to increase the longevity of the human species. "Anthropocentrists see the human species as the most significant fact of existence, and accordingly evaluate all else from a human stand." (Oelschlaeger 1991: 293)

A minority have adopted a counter-approach to resourcism which think of nature as an ecosystem, emphasizing the whole over the parts. Titled preservationism, this movement tries to grasp a holistic approach to environmental management. Some writers believe it is the preservationist movement that gave the Endangered Species Act of 1973 its holistic and heavy handed approach. Oelschlaeger also gives a description of Preservationists beliefs.

"Preservationists believe that natural systems are

- self-creating, evolutionary wholes with synergetic characteristics that preclude complete reduction and analysis
- coordinating interfaces in natural hierarchies where all elements are internally related
- Homo sapiens is related internally to the environment
- human actions can impair the ability of natural systems to maintain themselves or to evolve further
- human values go beyond those measured by the national income accounts to include the preservation of wild lands and life." (Oelschlaeger 1991:289 Table 5)

Preservationists largely maintain an anthropocentric view of nature, measuring it's values in terms of increased benefit to the human species. By assigning human value to wild lands and other life forms, preservationists are able to include them in a measure of worth. A focus on ecology and the ecosystem, preservationists push for large scale preservation in order to maintain the entire system of interrelated parts.

Recent changes in physics have aided a more holistic approach to nature and the earth. No longer do we consider anything to be in a static state. Even the basic building blocks, atoms

are said to be in constant motion and interacting through energy transfer. With current scientific theory in support of a dynamic and flowing nature, current naturalists have found increased momentum from the scientific community.

A shift away from the anthropocentric view held on to in Resourcism and Preservationism, the idea that life, rather than the human species, is the central focus of the universe (Biocentrism) has gained increased influence on society. In clear contradiction to Resourcism, Biocentrists measure values in terms of their benefit to all life, human or not. Many animal rights activists believe in the fundamentals of Biocentrism.

Along with Biocentrism, many 'extreme' activists move to a larger, more all-inclusive idea that natural systems are the focus of the universe (Ecocentrism). This allows that all matter, living or not, has intrinsic value as part of a natural system. Completely holistic, many followers of the Gaia hypothesis adopt the Ecocentrist ideas. A concise list of Eccentric beliefs were also included in the before-mentioned book by Oelschlaeger.

"ECOCENTRISTS believe that

- natural systems are the basis of all organic existence, and therefore possess intrinsic value
  - humankind is an element within rather than the reason to be of natural systems, and is hence dependent upon intrinsic value
  - ethical human actions (actions which promote the good life for humankind) necessarily promote all life on earth (preserves such intrinsic values as diversity, stability, and beauty)"
- (Oelschlaeger 1991:294, Table 6)

A movement toward a more vague, intellectual idea from Ecocentrism is titled Deep Ecology. Using the greatest wilderness writers, Thoreau, Muir and Leopold, followers of this field discuss an idea that hints of mystic ecology. Oelschlaeger provides a detailed list of what Deep Ecologists claim.

"DEEP ECOLOGISTS believe that

- all life on earth has intrinsic value
- the richness and diversity of life itself has value
- human life is privileged only to the extent of satisfying vital needs
- maintenance of the richness and diversity of life mandates a decrease in human populations
- humankind's relations to the natural world presently endanger the richness and diversity of life
- changes (consistent with cultural diversity) affecting basic economic, technologic, and ideological cultural components are therefore necessary
- "Green societies" value the quality of life (e.g., beauty) more than the quantity of life (e.g., GNP)
- individuals subscribing to these fundamentals of deep ecology are obligated to promote sociocultural change" (Oelschlaeger 1991:303, Table 7)

Deep Ecologists believe fully in the words of Thoreau when he states that "In wilderness is the salvation of the world." Many Deep Ecologists focus on questions of value rather than methods and paradigm structure, thus the body of Deep Ecology is open to input from wilderness and social ecology, ethnopoeetry, history, philosophy, anthropology, and sociology.

Certainly not all-inclusive, the movements of Resourcism, Preservationist, Biocentrism, Ecocentrism, and Deep Ecology contribute greatly to the body of ideas engulfing society. In constant change, these dynamic movements are noticed in every aspect of societies relation to the environment, from environmental policy to sociology.

**Thoughts and Speculation.** This research has been a great benefit to my understanding of the many historical influences which have played a part in my environmental ethic. As I rambled through the Rocky Mountain Range during my youth I often pondered over my personal relation to nature. I often felt that each object, living or non, was a part of me. I got so attached to certain sticks or stones that I took them home in hopes of enlightening my room with the same feelings I felt when I first encounter the object.

I can relate to John Muir's dilemma of blending monotheism with pantheism. In my early



years as an undergraduate I danced between these two ideas. In conclusion to this dilemma I have developed a personal approach that allows God to be every thing, process, and body. I accept whole-heartedly that the 'dominion' God gave to Adam was a 'stewardship', commanding man to be wise and learn how to live with nature. Although I cannot reject the orthodox idea that man is 'special' to God, with a divine purpose, I believe I can see and learn of God in nature.

I think that society will continue to debate questions of nature's intrinsic value and what the 'best' way to manage nature is. The clash between Anthropocentrism and Ecocentrism will become better defined as time passes, but the division will never dissolve. Much of society will hang to Modernism and anthropocentrism while others will move toward and be guided by the ancient ideas of Taoism and early Hunters and Gatherers.

Those who see all creatures in themselves  
 And themselves in all creatures know no fear.  
 Those who see all creatures in themselves  
 And themselves in all creatures know no grief.  
 How can the multiplicity of life  
 Delude the one who sees its unity?  
 --Upanishad



### Bibliography

- Budge, E.A.Wallis. 1987. *Egyptian Religion*. Arkana.
- Carson, Rachel. 1962. *Silent Spring*. Hamish Hamilton.
- Lao Tsu. 1972. *Tao Te Ching*, trans. Gia-Fu Feng & Jane English. Vintage, New York.
- Leopold, Aldo. 1949. *A Sand County Almanac*. Oxford University Press, Oxford.
- Lovelock, James E. 1979. *Gaia: A new look at life on Earth*. Oxford University Press, Oxford.
- Marshall, Peter. 1992. *Nature's Web*. Simon & Schuster, London. 463pp.
- Maugh, Thomas H. 1994. Plunder of Earth Began With Man. *Times*. June 12. A-1
- Nash, Roderick F. 1973. *Wilderness and the American Mind*. Yale University Press, New Haven.
- Oelschlaeger, Max. 1991. *The Idea of Wilderness: From Prehistory to the Age of Ecology*. Yale University Press, London. 459pp.
- Robson, Kent. 1995. Lectures for Early Greek Philosophy (Phil 311).
- White, Lynn. 1967. The Historical Roots of our Ecological Crisis, *Science*, Mar. 10: 1204-7.