

CULTIVATING WILDNESS

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"In wildness is the preservation of the world." - Henry David Thoreau

"In human culture is the preservation of wildness." - Wendell Berry

I. Introduction

Personal

I would like to explore a question in my life which I have felt instinctively for some time; yet which I have only recently begun to ask and identify. For several years I have wavered between farming and music, unable to commit to one in fear of losing the other. As my life has increasingly followed the path of music-making, I have responded with a need and a desire to work the earth, to become rooted to the land and to spend time in the wilderness. Yet the more I have worked on farms and spent time in the wilderness, the stronger has become my wish to express, to make sense of, and to share these experiences through music and art. Intuitively I feel that music and farming need each other. I have come to wonder whether artistic expression, as the practice of cultivating oneself, and agriculture, as the art of cultivating nature, might not be inherently connected and mutually dependent on one another. It is my strong belief in the possibility of this interconnectedness that lies at the heart of this inquiry. In this paper I seek to explore this interconnectedness in terms of art and agriculture. I consider whether music and farming are not actually two inseparable reflections of a single practice. A practice which I would like to call *cultivating wildness*.

Questions

My first exposure to the idea of wildness occurred many years ago through Henry David Thoreau's statement: "In wildness is the preservation of the world." While I intuitively felt this statement to be true, I struggled to understand how wildness and preservation related to my own interests in music and farming? Somehow, I felt the picture to be incomplete. How did agriculture and culture contribute to this preservation? What was the human role in preserving wildness? Then I discovered the work of contemporary poet, essayist, and farmer Wendell Berry. In response to Thoreau's words, Berry offers the following statement: "In human culture is the preservation of wildness." Finally, a door opened!

Topic

Life is preserved in wildness because wildness *is* the instinct (present in all species) to survive. In wildness is the instinct to preserve life. Our present human civilization however, seems to be rapidly losing this instinct to preserve itself, to survive. It appears as if we are losing our wildness. Throughout history, our human development of cultivating and civilizing the world (from hunter-gatherer, to agrarian, to the present urban society), has been accompanied by an increased separation and loss of wildness. Consequently, it seems that we have lost significant aspects of our cultural ability to relate to wildness. Throughout history, it seems that our ability to preserve wildness in the world has corresponded with our cultural ability to preserve wildness within ourselves. In losing this wildness within ourselves, are we not losing the very sources of our own survival? In destroying wildness in the world, are we not destroying the only possibility of the preservation of the world? The question must be asked: Can we re-gain this instinct to survive? Can we regain this lost wildness? Can we re-learn our cultural ability to preserve?

Objective

This paper suggests that it is by re-learning to ‘cultivate wildness’ in ourselves that we can regain our instinct to preserve wildness in the world. Our human responsibility to preserve life on earth therefore, is in the practice of ‘cultivating wildness’ within ourselves. Berry advises us of the all-inclusive necessity of this practice and warns us against the dangers of separating human and nature or body and spirit. He describes how throughout history, this great split in human perception between body and spirit has caused our loss of wildness. For Berry however, human and nature, body and spirit are inseparable, interconnected, and ultimately one. Therefore, in order to cultivate wildness in ourselves, we must learn to cultivate it in nature. In order to cultivate wildness in the earth, in the substance life, we must learn to cultivate it in the spirit, in the essence of life. Farming and music therefore, as the cultivation of the *substance and essence of life, are also inseparable.*

Thesis

Agriculture, as a practice of cultivating the earth and substance of life, and art, as the practice of cultivating the spirit and essence of life, are ultimately indivisible in this single practice of cultivating wildness - the preservation of life, the work of human culture.

Structure (still needs work)

I open by framing my inquiry within the global context of climate change. Examining the contemporary issues of *responsibility* and *inaction*, I discuss the importance of *individual will* and *humility*, both of which are required for any kind of action and change. I then take three inroads searching for some connections between the main pillars of this paper - *wildness*, *preservation*, and *culture*.

1. In the first one I explore the significance of Thoreau's statement concerning wildness and the preservation of the world. Tracing back the roots of the words *nature* and *wild*, I uncover the inherent interconnectedness between the seemingly separate entities of human and nature, body and spirit, the sacred and the wild.
2. Following this I relate wildness to some basic concept preservation: *soil fertility*, *energy*, and *health*. Through soil fertility, we can see the connections between wildness, mystery and the preservation of life. In energy, I examine the *mechanization* of energy as the opposite to wildness (natural energy). And in health, I look at and the modern symptoms of specialization, competition and violence as consequences of our initial separation of body from spirit.
3. Finally, I explore Berry's statement concerning culture and wildness. Here we see that it is human culture and art, as the antidote to mechanization, as the practice of preserving 'mystery,' and as the acquired human *skill of responsibility* – “in which is the preservation of the world.”

II. Global Environmental Context

My curiosity in the ideas of *wildness*, *interconnectedness*, and *preservation* brought me several years ago to the study of the environment. The world today is said to be moving increasingly towards urbanization, globalization, and specialization. These trends have contributed to our ever increasing distance from wildness both around us and within us.

This wildness (as the underlying source and unifying reference of the planet) is what helps us connect seemingly separate global issues and problems. By distancing ourselves from this wildness, we fail to realize how these different problems – such as the increase of droughts, floods, and hurricanes are related to the practices of industrial agricultural, or how the increasing concentrations of economic poverty and wealth are related to incompatible differences in cultural values. The impacts of “war, the devastation of our natural environment, the persistence of poverty along with progress even in the richest countries – are not isolated problems. They are different facets of one single crisis, which is essentially a crisis of perception” (Capra, P 27). Today we find ourselves at the brink of a major global crisis. Yet because we have disconnected ourselves from the unifying source of wildness, we have separated the totality of this crisis into separate problems of climate change, terrorism, poverty, hunger, disease. We are unable to fully perceive the interconnectedness of this crisis and are therefore unable to fundamentally alter it.

Climate Change

According to current scientific research, we have confirmed that the planet is quickly approaching a global crisis in the environmental called climate change. “The average global temperature has risen 0.6 degrees centigrade over the past century” (Monbiot, 3). According to the world meteorological organization, “this rise in temperature in the twentieth century is likely to have been the largest in any century during the past 1000 years” (Monbiot, 4). The increase in temperature has caused a rise in the average global sea levels “by about 2 mm a year” (Monbiot, 6). This phenomena has contributed to the current increase in natural disasters such as hurricane Katrina in 2005, and the recent splitting of the polar ice cap. Likewise, the World Health Organization has estimated that “150,000 people a year are dying as a result of climate change, as diseases spread faster at higher temperatures” (Monbiot, 6).

The general consensus in the scientific community predicts an increase in global temperature by 2030 of at least two degrees (which is the average increase above pre-industrial levels). Two degrees is the point beyond which certain major ecosystems (that previously absorbed carbon dioxide, will now begin to release carbon dioxide into the atmosphere and trigger the unstoppable collapse of ecosystems around them. An increase

of two degrees in global temperature is expected to result in a rise in the ocean levels of at least 40 cm, (the middle of expected range) which may bring about flooding of many of the world's major urban centers. This means around "200 million people in danger of salt water floods, and 2.3 – 3 billion people with the risk of drinking water shortages" (M, 8). These are only some of the predictions of human consequences based on a warming of two degrees. If the worst predictions come true (meaning up to an increase in global temperature of up to 11.5 degrees), then this change in climate could potentially "destroy the conditions which make human life possible" (Monbiot,1).

Responsibility

Are humans responsible for creating this climate change? One could argue that this is a mute or irrelevant point. It is happening regardless whether humans caused it or not. Yet if we have not caused climate change, then how could we be capable or even responsible for solving it? However contradictory, scientific research has proven without doubt that we are indeed responsible. Climate change or global warming (the change in the composition of the earth's atmosphere) is caused by an increase in green house gases of which carbon dioxide is the greatest contributor. It has risen "faster over the past century than at any other time over the past 20,000 years . . . from 280 to 380 parts per million parts of air" (Monbiot, 5). According to the research, the only means by which green house gases could have accumulated so quickly is through the human industrial way of life. Carbon dioxide (largely but not exclusively) "produced by burning oil, coal and gas, clearing forests, and the methane released from coal mines and landfill sites. To doubt today that man-made climate change is happening, one must abandon science and revert to some other means of understanding the world" (M, 3). Furthermore, according to a study in *Science* (2005) "there is no longer any data contradicting the predictions of global warming models" (Monbiot, 5).

The facts seem to be crystal clear. We are responsible (because of our use of fossil fuels) for creating what might ultimately become a global flood. Yet scientific research has also given us the understanding and technological capability to prevent or *change* this approaching crisis - if act upon in the very near future. According to George Monbiot's recent research in his book *Heat: 'how to stop the world from burning'* (2006), it is a question of "reducing our carbon emissions by 90% by the year 2030" (Monbiot, 1). He

also tells us that all of the technological tools to realize this massive reduction in emissions do currently exist. It is not a question of science or technology. Why is it that then, despite all of the advances of modern technology and scientific understanding of the complex interdependence of the biosphere, modern civilization is still struggling to find an ecological, and sustainable way to live on the planet?

Inaction

Can it be a question of ignorance? Do people truly not believe there is a crisis? Are we really waiting for someone to come up with a new ‘infinite’ source of energy? Is it a question of implementing the right form of governance, policies and laws (such as Kyoto), or stricter economic incentives (such as carbon credits). In the film “An Inconvenient Truth,” former United States Vice President Al Gore tells us of a frog who, when placed in hot water, jumps out. That same frog however, when placed in cold water that is slowly brought to a boil . . . will fall asleep and die, because he is not aware (or conscious enough) of the gradualness of the heating water. This story exemplifies the current global crisis not only as it pertains to the environment, but in almost every aspect of our present social and political inactivity, from genocide in Rwanda, to high rates of suicide in many developed nations. Are we like the frog in the heating waters of a global crisis? Are we really aware of what is happening to us? Are we able to act?

This paper suggests that, due to the increasing specialization and urbanization, it is because we perceive our global issues as separate problems and study them independently from each other in terms of their specific solutions, that we are unaware of the connections between them. The study of the environment and climate change is separate from the practice of farming which is also separate from the creative thinking and artistry found in music. In terms of the story of the frog, our specialization has made it difficult for us to be aware enough of the *interconnectedness of the problems*. *Due to our own increasing sleepiness, we have failed to connect the general increase of heat in the water.* How do we wake up, how do we act?

Will

Waking up and acting is not a question of knowledge or understanding. It is not a question of science or technology. It is a question of will. Monbiot believes that a change in social will is dominantly a political and economic question. He argues for a radical

change in governance, in policies, and in the remaking of laws which would result in the enforcement of a 90% reductions in emissions. This paper suggests this kind of change in public policy must first be taken on as an individual responsibility before it can be passed as policy in government. The private life influences the public before the public can influence the private life. *Ultimately, the central question of this paper is whether we possess the will to change the way we live our lives? Do we have the individual humility and wisdom to accept that there are certain limits to our human condition that we cannot overcome and that will remain mysterious to us? And do we have the public maturity, the responsibility and the will to act accordingly?*

III. In wildness is the preservation of the world.

In 1862 Henry David Thoreau wrote “In wildness is the preservation of the world.” What did he mean by wildness? How does this idea of wildness relate to that of wilderness, nature, and human nature? How can the preservation of the world, the continuation of life on earth, be bound to this idea of wildness?

Language

Thoreau was a man of the word, of language. In attempting to uncover Thoreau’s intentions, it might help us to examine the roots of the words we are trying to understand. Gary Snyder describes how the origins of words and language “meander like great rivers leaving oxbow traces” (Snyder, 5) of forgotten ancient stories. In tracing these words to their roots we find hidden stories from the long forgotten past.

Nature

The Latin root for *nature* comes from *natura* meaning “constitution or character.” Originally derived from *nasci* meaning “to be born” (as in *natal* and *native*). The probable Indo-European root, via the Greek root *gna* (cognate or agnate), is *gen* (Sanskrit *jan*), from which is derived *generate*, *genus*, *kin* and *kind*. If we examine our current use of the word *nature*, we find that we have evolved two distinct meanings (or uses) for the word. On the one hand nature implies the physical universe and all its properties (Snyder, 9), also known as ‘mother nature.’ Made up of the infinite combinations of the basic elements of earth, air, fire and water, this is the *natural* world which is the *building block* of life. It is the body without which life would have no substance or form in which to live.

Yet the word nature also implies the “fundamental character” or “innate constitution” (Encarta Encyclopedia) of this body. We call this our ‘human nature’ or the ‘inherent nature of things.’ This is the innate essence or energy which moves and inspires the body. It is the vital breath of life that *in-spires* the heart to pump blood and the lungs to inhale air. Without the spirit the body dies. Without the body, the spirit cannot live.

Body and Spirit

The word spirit is defined as “*essence or inherent nature*” (Encarta Encyclopedia). It is related to the following ideas of: life-force, energy, Chi, strength, courage, guts, will, determination, mind, or moral force or fibre of a person. In our western tradition it is most often called the heart or the soul. Spirit has the characteristic of meaning both the individual inner-self, as well as the greater universal (Great Spirit).

In this way we see that the word *nature* describes at once the material *substance* of life (the body) and its immaterial *essence* (the spirit). Within this single word ‘*nature*,’ body and spirit are bound together, inseparable at their *natal* and *native* source of birth. It is only since the advent of western scientific abstraction that we have started to perceive a duality or separation between body and spirit. However, searching the roots of language can show us that maybe we have miss-judged our perceptions? It is precisely because, in the word nature, substance and essence, body and spirit are unified, that we should be wary of separating them. Wendell Berry describes how substance and essence are inseparable because ultimately substance *is* essence. Later on in the paper I will describe how he believes there to be no duality at all between body and spirit. For Berry there is no spirit that is separate from the body because, in the words of William Blake, “life has no body distinct from the soul.”

Nature and Human

For Berry, the separation of substance from essence or body from spirit is the original divide from which all other dualities have followed. One of these dualities is that between human and nature. With the transformation and separation of human consciousness over time, the word nature today also has come to define the *nature* outdoors, outside of our homes, and ultimately outside (or separate) from our selves. It has come to mean life ‘other than human,’ or in contrast to humanity. It was this separation of human and nature that originally engendered the idea of *wild*.

Wild

The word *wild* is “like a gray fox trotting off through the forest, ducking behind bushes, going in and out of sight” (Snyder, 9). Elusively rooted to the Germanic *wald* - forest, Latin *silva* - sauvage, forest, and the Indo-European root *ghwer* (via the Latin base *ferus* - feral, fierce), *wild* might be the most closely linked to *will* because of its correlation to *character*, *force*, and *spirit*. In our dictionaries and encyclopedias however, wild is largely defined in terms of its lack of will – specifically lack of *human* will: According to the Oxford dictionary and Encarta Encyclopedia *wild* is defined “by what – from a human standpoint – it is not.” Wild is defined as “untamed, uncultivated, undomesticated, uninhabited, uncivilized, unrestrained, insubordinate, artless” (Snyder, 9). Is it possible to define *wild* affirmatively by what it *is* (instead of by what it is not)? Is it possible to catch a wild gray fox and keep him *wild* in captivity? Is it possible to *cultivate* the wild huckleberries which Thoreau treasured so dearly? Is it all possible to *cultivate wildness*? Gary Snyder attempts to invert the conventional ‘negative’ definitions of wild into positive affirmations. His list includes: “original, aboriginal, native, sustainable, natural, spontaneous, free, self-propagating, self-reliant, whole, healthy” (Snyder, 10). This comes very close to the Chinese term *Dao*, or the *Way*: “eluding analysis, beyond categorizing, definitive yet contradictory, complex yet simple, orderly yet chaotic and free, insubstantial yet complete, self-organizing, self-informing, self-manifesting, self-authenticating, and independent yet completely interdependent, playful yet always a matter of survival, surprising yet unchanging, impermanent yet ultimately sustainable, empty yet fulfilled - which is also not far from the Buddhist term *Dharma*, “with its original sense of *forming* and *firring*” (Snyder, 11). By this Snyder means that the wild is the dynamic and unpredictable interplay between life and death - the only constant to life. “The world is nature, and inevitably wild, because the wild, as the process and essence of nature, is the ordering of impermanence” (Snyder, 5).

In its ability to elude us and in our *inability* to capture it, we must revert to defining *wild* as something we cannot fully understand. The wild can really only be defined as the mysterious or the miraculous. Cultivating wildness then, as the practice of cultivating this *mystery* or *mysticism*, is ultimately nothing less than practicing reverence towards what is

mysterious, sacred, and holy. *It is in this cultivation of wildness as mysticism, sacredness and holiness, that I believe Thoreau saw the preservation of the world.*

IV. Soil Fertility

The soil is the fundamental building block of all terrestrial life. Almost all of life depends on it, and in death, all of life returns to it to be transformed into new life. The soil is alive, and yet it is filled with decaying bodies. In their death the soil creates food for countless micro-organisms. Through its own regulating capacities, the soil can also bring about disease in order to preserve its overall health. It is at once “the healer, great connector, source, destination, restorer, and resurrector of life” (Berry, 88). Civilizations have raised themselves out of the earth and have fallen back into its body, depending upon their ability to understand and care for the fertility of the soil. This fertility is the earth’s miraculous power to create life out of death. The mystery in this process of regeneration *is* the mystery of wildness. In agriculture as in the wild, this fundamental biological process is a reflection of the overall persistence of life through death. “It is the passage of energy through changing forms” (Berry, 87). It is therefore “impossible to contemplate the life of the soil for very long without seeing it as analogous to the life of the spirit” (Berry, 86).

Nature as Teacher

Soil fertility, biologically and culturally speaking, is the first condition of any permanent civilization and culture – nomadic or agrarian. Nomadic cultures from the past have interfered very little with nature’s work in regenerating the soil. Agrarian cultures on the other hand, have had to learn to replicate the workings of nature in order to maintain soil fertility to preserve life. Sir Albert Howard, in his work on soil fertility, looked at nature as the ideal preserver of the soil. For Howard, nature always remains the best farmer. He speaks of the forest, the prairie and the ocean as being the best teachers of agriculture. He has observed the main characteristics of nature's farming in the following manner: “Mother earth never attempts to farm without livestock; she always raises mixed crops; great pains are taken to preserve the soil and prevent erosion; the mixed vegetable and animal wastes are converted into humus; there is no waste; the processes of growth and

the processes of decay balance one another; ample provision is made to maintain large reserves of fertility; the greatest care is taken to store the rainfall; both plants and animals are left to themselves to protect against disease” (Howard, 4). Howard found that diversity and the recycling of all ‘wastes,’ are two of the most important concepts in nature’s preservation of soil fertility. He also found that there is no “hand to mouth existence about nature's farming.” In nature, there is always a “reserve of fertility in the soil” (Howard, 3).

What is soil fertility?

The process of the soil’s re-fertilization is highly complex. It is dependent on an “inexhaustible intricacy” of variables within the local geography, topographic, and climate. It affects and corrects some of these place-specific variables such as the irregularities in local rain fall, diversity of vegetation, protection against local disease, and soil erosion. It is therefore extremely diverse. Within one small area (such as a farm) there maybe many different kinds of soils. Howard found that because of this diversity, because of the infinite number of variables that affect it, the soil’s fertility cannot be understood by the conventional approach of scientific isolation and quantitative analysis. The fertility of the soil can only understood as part of the whole of Nature’s round. This “Wheel of Life,” from soil to animal and human and *back to the soil again*, must be studied as a complete process. It is observed “in quality more than it is calculable in quantitative terms” (Howard, 22). It is governed by the proportional balance between growth and decay. If this balance is offset, then “potential assets (such as manure and organic residues) become potential wastes” (Berry, 82).

Mechanics of soil fertility

The energy for the growth of life is derived from the sun. Through photosynthesis, the chlorophyll in the ‘green leaf’ becomes the mechanism by which the plant is able to produce food – edible energy. For this, the plant depends on the contact between its root system and the soil, which happens in two ways: through contact with root hairs and by mycorrhizal association (Howard, 23). The root hairs depend on tiny ‘pore spaces’ in the soil, in which the essential activities of bacteria, fungi, and protozoa, take place. These pore spaces are dependent on the aeration of the soil. Hence the introduction of soil cultivation in agriculture. The mycorrhizal association is a process by which certain soil

fungi are directly absorbed by the plant. Both processes are dependent on humus. Humus, a complex residue of partly oxidized vegetable and animal matter, is the key ingredient in the life cycle “without which the wheel of life cannot function effectively. It is the maintenance of humus which defines the fertility of the soil; and it is humus which is the real basis of health and of resistance to disease” (Howard, 39).

What is Humus?

Humus is often described as the 'life-force' of the soil. Yet it is difficult to define humus in precise scientific terms. “It is a highly complex substance, the full nature of which is still not fully understood” (Encarta Encyclopedia). Physically, humus can be differentiated from organic matter in that the latter is a rough looking material, with coarse plant remains still visible, while once “fully ‘humified’ it becomes more uniform in appearance (a dark, spongy, jelly-like substance) and amorphous in structure” (EE). That is, it has no determinate shape, structure or character. Due to this indefiniteness, humus cannot be reproduced as a chemical fertilizer. It is dependent on circumstance, varying in levels of carbon and nitrogen depending on the materials, place, conditions and time of its formation. It is alive and dynamic in that it is in a continuous process of change. It is in the constant state of decomposition. Ultimately humus can be described as ‘dead-life,’ being ‘reborn’ or regenerated. It is made up only of organic life, without any external inputs. It is the substance of life at the threshold between decomposition and regeneration. This miraculous yet mysterious quality of making life out of death is what make humus quite possibly one of the most profound (if not *the* most profound) substance on earth. It is the living proof of the presence of wildness “within the dark, mysterious body of the soil” (Howard, 28). If the health and preservation of life is in the fertility of the soil, and if soil fertility is dependent on the maintenance of humus; then in this dark, mysterious and ‘wild’ substance that miraculously turns death into life, *in humus - is the preservation of life.*

Preserving Humus – the core of culture

Due to its nature however, the maintenance of humus requires the element of labor. The preservation of humus is the invisible work of the myriad of invisible organisms within the soil, and the labor of the people who work the earth. More than energy or money, humus is said to be the critical substance and quantity in agriculture and therefore the

foundation of any sustainable culture and civilization. Humans have an intimate working relationship with humus, but they cannot make it. The good farmers are students in this mutual relationship, not “appliers of generalized theoretical methodologies” (Berry, 86). They know that the soil is improved by what humans do, as well as what they do not do. This illustrates the principals of do-nothing farming, forbearance, and self-restraint. Here we must ask: at point does scientific understanding fall short, and mysticism take over?

Soil Fertility in History

Howard claims that throughout history, civilizations have risen and collapsed based on their ability to preserve the fertility of the soil, to preserve humus. A very simple yet frighteningly true hypothesis. He traces the rise of the Roman Empire back to the cultivated rich soils of the small ‘free state-holder’ farms which started in Ancient Greece. “The strength of Rome was built on the most extensive and immediate mastery of her citizens over the soil” (Howard, 7). The entire constitution and policy of Roman conquest rested in the concept of the small land-holder, the small family farm. The aim was to increase the number of its freeholders. He blames the fall of the empire on its inability to maintain soil fertility. This came about in four ways: the drain of manhood by the military legions, the operations of capitalist land-lords, the failure to work out a balanced sustainable agriculture, and the employment of slaves. The natural consequence was the destruction of the middle class, particularly the small land-holder. These were replaced by the growth of the large capitalist agricultural estates and the emergence of the tax-farmers and agricultural proletariat. Howard believes that the loss of individual ownership and pride of the small-holder ultimately was destroyed by this capitalist system. He believes that agriculture “should never have been allowed to come into conflict with the operations of the capitalist” (Howard, 9). For a civilization to preserve itself, a compromise between a permanent agriculture and finance must evolve, otherwise both are ruined.

V. Energy

The essence of wildness, the source of life in its purest form - is energy. Energy is life. William Blake describes it as “the only life.” It is the driving force behind the human

economy as it also is the vital force behind “Creation’s Great Economy” (Berry, 233). According to the first law of thermodynamics, energy cannot be created or destroyed. It can only be changed. Humans however, have learned to change energy into “unusable states” (Berry, 285), such as carbon dioxide pollution. Humans have also learned to preserve energy in cycles of use and re-use, such as composting organic waste back into the earth. Through this process we keep intact the natural cycle of “birth, growth, maturity, death, and decay” that Sir Albert Howard identifies as the “Wheel of Life” (Howard, 8).

Living and mechanical energies

Although energy is expressed in infinite ways, Wendell Berry believes that energy used today can be grouped into two categories: energy that is made available by living beings, and energy that comes from machines. While the energy from machines is a relatively recent invention in civilization, the energy expressed in living animals and plants is the energy which originally started with life on earth.

All energy on earth has its ultimate physical source in the sun’s energy - in light. Light, the first element in most creation stories, is also the only ‘infinite’ source of energy known to humans (given life expectancy of the sun). According to the second law of thermodynamics, energy moves from complexity to simplicity. Due to this law, the universe overall is said to be running toward simplicity. However, due to the sun’s light hitting the earth (and the DNA encoded in life), the earth is said to be “running towards complexity” This complexity is embodied in the “self-organizing ability” of plants, animals, peoples, ecosystems, physical labor, thinking,” and love (Brown, 2005). This ‘self-organizing ability’ “is what makes couplings – micro (combinations of carbon molecules), - and macro (sex) possible” (Brown, 2005). Roughly, this represents Berry’s ‘living energy.’

Over millennia, some of this ‘self-organized sun light’ has also been stored “in the form of long carbon molecules in places like topsoil, fingernails and fossil fuel deposits” (Brown, 2005). The excavating and burning of these non-renewable resources are what most machines today run on. This energy is what Berry calls ‘mechanical energy.’

Living Energy

In general, living, or biological energy, cannot be stored in large stockpiles or reservoirs. It is a 'charged current' alive in the fertility of the soil, in the workings of plants, animals and humans, and in the movement of the weather and water. It can be preserved only *while* it is being used up. We must harvest and eat food in order to be able to use its energy. In this way it is analogous to the flow of life on its journey toward death. To receive this energy - "is at once to live and to die" (Berry, 84). However, the use of this living energy is also its overall preservation. The functions of production and consumption become its own regeneration (Berry, 85). Berry believes that humans can "probably even augment this energy in use" (Berry, 86). By proper care, we can 'build' soil fertility. This gives living energy the ultimate possibility of infinite use. If preserved properly, the cycle of regeneration in the soil can continue indefinitely. The Wheel of Life is preserved through the continuous cycle of birth, death and rebirth – the law of wildness. This living energy therefore embodies the mysteriousness and sacredness of wildness.

Mechanical Energy

Mechanical energy on the other hand cannot be preserved, let alone improved in use. Its only functions are production and consumption. It cannot regenerate infinitely. It relies on the possibility of large reservoirs or batteries of power. In this way machine energy is based on *finite* resources. One cannot have an infinite energy, if the reserve is not being recharged or rebuilt by its own use. Mechanical energy has freed humans of manual labor and natural limits, but has created an "unnatural and illusory laws" (Berry, 83). Some energy sources, such as solar, wind, geothermal, or hydrogen power seem abundant or infinite within our moral short-sightedness of immediate use. However, Berry argues that mechanical energy creates unnatural quantities of power which require an equal and sometimes 'unnatural' increase in ethical responsibility. Ultimately, Berry suggests that it is a question of balance. Mechanical energy is part of our technology, part of our culture. We cannot ignore it, but we can learn to use it in proper balance with living energy.

Power

Today it could be argued that the rise in alternative energies such as wind, solar, hydro, geothermal, and hydrogen power, have blurred the distinction between living and

mechanical energies. It could also be argued that sperm banks kind of ‘reservoirs’ of living energy? It could be argued that this distinction is dated? Ultimately it is a question of balance, of scale and of degree. For this there is no rule or policy. Every case is individually assessed. However, when examined in terms of the ‘wildness’ and ‘mysticism’ of living energy, it is still clear today that neither wind, geothermal, or solar power, can replace the feeling of wild life and sacredness of “organic horse power.”

VI. Health

The concept of health is rooted in the concepts of *wholeness, earthliness, and holiness*. For an individual to be healthy, he or she must become whole - both individually and as a part of a larger community. On the individual level this means the completing and balancing of the *body* and the *spirit*. On the larger level, health means to find our physical place on earth and our greater spiritual purpose in the world. Healing therefore is impossible in isolation. Ultimately, the concept of health as wholeness, earthliness, and holiness, are concepts that relate it back to the idea of wildness. One could say that ‘in wildness is the state of perfect health.’

Wendell Berry claims that our modern sickness or ‘dis-ease’ of despair, meaninglessness, and hopelessness, cannot be healed in isolation, because isolation is its cause. Loneliness is the opposite of health. He believes that the concept of health is connected to the entire community of creation. If Ghandi’s principal of freedom implied that “no one is free until all are free,” then by the same standard ‘*no one can be healed or become whole until all are whole.*’ Today, individuals are paralyzed by loneliness within society, just as humanity as a whole is paralyzed in loneliness within the entire community of creation. For Berry, only a reconnection to the earth and to a community of people can heal our sense of being lost or alone. Healing therefore, is the reuniting of the individual with the community. Wholeness depends upon all the possible processes around us. It depends on the biological processes as much as it relies on the spiritual ones. It depends on people as it depends on plants, animals, and the fertility of the soil. All these processes must strive toward an equilibrium with each other in order for healing and wholeness to take place. Just as it is impossible for health to be associated with polluted air and water or the impoverished fertility of the soil, it is impossible that our bodily health or the general

health of the world, can be “compatible with the current spiritual confusion or modern cultural disorder” (Berry, 103). The health of the body is directly dependent upon the health of the spirit. Healing is in the union of human and nature, as it is in the communion of the body and soul.

Modern specialization

Modern medicine in its specialization however, has generally approached the idea of health as the “individual treatment of the symptoms of pain and disease” (Berry, 103). To attempt to heal the body alone without also healing the spirit and the community in which it lives, is to “collaborate in the continuation of the disease” (Berry, 104). Our fragmentation of the problem into specializations “cannot be our cure *because* it is our disease”(Berry, 103). Today, we have taken the single, whole and sacred art of living that was meant to keep us healthy - and separated it into various specializations including medicine, agriculture, art, religion, etc. In becoming ever more specialized, these independent disciplines have disconnected themselves from their unified source - wildness. The wilderness, as the home of wildness, is a place of sacredness, and perfect health where we are healed and made whole again because we are reminded of our origins and our humble place within the universe. The wilderness is the place of sacredness and holiness where one “goes to be reborn.” It is the “wildness of the desert and not the temples of humanity that has given us our prophets” (Berry, 104). Unfortunately today, our specialized arts and sciences have all but “destroyed the wilderness and the ancient communal rites of passage that turn us toward the wilderness and bring us back home again” (Berry, 104).

Great Divide

The modern specialist system’s most fundamental damage appears to have started by the religious and spiritual isolation of the soul from the body. Long ago, this divide was born by the separation and elevation of the human from the wholeness and wildness of creation. Through the institutionalization of religion, the soul was “set into direct conflict and competition with the body” (Berry, 104). A “spiritual economy” was set up in which the soul was to deny the body in order to triumph over it. However, this initial split spread through the entire tapestry of human culture dividing all the fundamental arts of living (such as agriculture and government) and the spiritual rituals (such as music and

medicine), into today's fields of hyper-specializations such as neuro-brain surgeon, quartet violinists, and hog farmers. Eventually, philosophy as "the watchman of the universal ethic" (Schweitzer, 5) ceased to have any worldly purpose. Religion did not see that it was "not possible to devalue the body, but still value the soul – or value anything else" (Berry, 105). The signs were obvious. Contempt for the body manifested itself themselves in contempt for other bodies, such as slaves, laborers, women, animals, plants, the earth, and water. In defense, the body set up its own "material counter-economy based on the law of competition" (Berry, 106).

Today, in the evolution of the "survival of the fittest" towards modernity, post modernity and extreme relativism, the body now aims to triumph over the spirit. The spiritual, moral and ethical beliefs and values that once held humanity together have now become all but meaningless. The symbols in language, art, and ritual, through which we once communicated meaning, identity, community, and purpose, are falling away. The ultimate symbol of value today has become the unique, strongly independent, highly specialized, and successful individual as a global citizen. Being separated from community, family, land, and soul, it is no wonder that we feel alone and hopeless. We are the least whole we have ever been in human history. How could we possibly be healthy? How could we possibly be able to take responsibility and act for something we are not longer connected to? In our need to connect to something, we resort to 'striving for an unreachable ideal' – competition.

Competition

Darwin's evolutionary law of "survival of the fittest" states that life has evolved on the principal of competition. Competition has become today's 'evil necessity.' Our economy and our governments are ruled by competition. Competition is the ideal of the brave individual, seeking his or her fortune in the world. If competition is the correct evolutionary relation of creatures to one another and the earth, then why is it that the world seems to be devolving towards a state of exploitation and disease rather than evolving toward a state of stability and health? Can health and happiness truly be achieved through competition? Has this idea of competition always been present in humans or in the wild? Or is competition another extension of the great division between body and soul?

There are two conditions required for the existence of competition. The first is that competition is based on the fact that there are at least two entities willing to compete against each other. Alone, there can be no competition in the true sense of the word. If we compete against ourselves, there will be no winner or loser. The existence of competition therefore must include a division, the concept of 'other' or opponent. In this way it becomes apparent that it was only after body and soul were divided that the idea of competition was even possible to imagine. The second condition is that competition is finite. It is not an infinite game, but a finite one with a clear ending decided by a winner and a loser. Competition does not lead to diversity or more possibility. In agriculture it leads to monoculture. In art it leads to non-creativity, sterility. Ultimately, competition eliminates itself.

Violence

Through competition we see that all relationships also become competitive and exploitive. In our ultimate loneliness, separated from the world, but longing for some form of contact, we are condemned to resort to competition. In competition we resort to its extreme form, violence. However, "though there might seem to be the illusion of categories violence, there are no categories of victims" (Berry, 106). Violence against one is ultimately violence against all. The wholeness of health is broken down by the violence of competition. "Competition and violence become our only compensation and means of enacting out the empty links connections and identities between body, earth, and soul, that still persist (like shadows) despite their separations" (Berry, 107). What else would push school children to shoot their fellow students?

VII. In Human Culture is the Preservation of Wildness

The split between body and soul eventually separates practice and ethic. As practice becomes more and more specialized, so cultural ethic and values become more and more abstract. The result is a mechanization of practice which corrupts the ethic of responsibility and value and replaces it with the drive for competitive efficiency. The values of care and responsibility may start out being corrupted in only one discipline, such as in the production of food or making clothes. However, because of the inherent

inter-relatedness of economy and culture, this damage, sooner or later, will spread to all – like air or water pollution. It cannot be contained or isolated. The resulting contradiction between destructive practice and idealist ethics becomes the hypocrisy of our modern time. Berry asks: “how can we justify the secrecy in governmental intelligence units in the name of honesty and democracy? How can we defend military violence in the name of world security and peace? How do we promote health (even just physical health) and yet ignore questions of value and integrity in agriculture? How can we degrade all forms of essential work, such as farming, and yet expect the arts to flourish on the weekends?” If we corrupt agriculture, we corrupt culture. We are one body – and “what afflicts the hand will afflict the brain” (Berry, 91)

Mechanization

Mechanization is the ignorance of these relationships and interdependences. By replacing qualitative value with quantitative productivity, machines have the ability to disconnect us from life. “They come between us and life” (Berry, 91). The problem is that we cannot live by machines alone. We need direct contact with the sources of life: air, water, food, sunlight, communication, and love. We need contact with the essence of life, with wildness. We require the spontaneous, unpredictable, instinctual *wildness* of life. The more machines obscure these fundamental values and processes, the weaker our health and well-being becomes. In mechanization, “we prosper at the cost of a fundamental degradation” (Berry, 92). This degradation is the loss of wildness. “In mechanization is the destruction of wildness.” Machines however, are part of the reality of our time. They are a part of our culture - our technology and culture of living. Mechanization has become a part of our human evolution, part of our search for the infinite. It is impossible to go back in time. What is an antidote to mechanization? How do we keep wildness alive in the wake of global mechanization?

Skill

Skill is the “acknowledgment of our responsibility to other lives. It is the practical understanding of value” (Berry, 91). Skill is not instinctive. It is not innate in humans, nor is it an impulse in nature. It is not found in wildness. *Skill is learned in culture.* It is

the wisdom gained through personal experience that can only be transmitted from person to person, like an oral tradition. It is inherited life knowledge passed down from generation to generation. It is not learned in books, nor taught in auditoriums. *Skill is the practice and the art of cultivating wildness.*

Through skill we make the connection between our values, our ethics, and our work. Skill is defined by the way in which we use our tools and technologies to live and work. Skill is always qualitative before it is quantitative. It is measured in the ‘quality’ of the work and skillfulness of the worker, rather than quantity of the work produced. Machines, on the other hand, promote quantity and efficiency. By automating work, they separate this connection between value and work. In order for this connection between work and value, ethic and practice to be cultivated, our skill must be two-fold. We must learn the skill of using the technology, and we must learn the skill of understanding the effect of the technology we are using. Only in understanding its effect, can we take on the responsibility and capability of restraint that inherently comes with any acquired technology.

Culture as the Skill of Responsibility

The use of any technology, machine or otherwise, requires skill. The discovery of the ‘digging stick’ was an acquired skill which enabled humanity’s very first steps in agriculture. This technology however, brought with it the possibility of potential damage – the disturbance of the earth. In response, the equally important skill of understanding the *effect* this technology (the drying up and cracking of the earth, or the accumulation of excessive water) needed to be learned. This was the more difficult, complex, and abstract work of long-term observation, intuition and forbearance. It was the skill or wisdom of learning restraint in order to restore and preserve the soil’s fertility. This skill was passed down largely through culture: oral traditions and practices, stories and rituals, music and dance. While the first skill was the learning and use of the technology, the second skill can be seen as the learning of the responsibility that accompanies that technology. They are inter-dependent of each other. One cannot produce ‘good work’ irresponsibly. Over time, the skill of responsibility grew proportionally with the growth of technology - from the “magic and cunning” of the Bushman hunter, to the mutual collaboration between draft horse and farmer. In agrarian

culture the ground was broken on a larger scale. This increased the total hunger by the addition of animals. However, the resulting animal manure meant a higher skill, responsibility and understanding of the added element of animal husbandry. It could be argued that the original purpose of art and culture and later philosophy and religion was to up hold this skill of responsibility.

Responsibility in Mechanization

Responsible work requires attention to the care, detail, and quality of work. It requires what some people might call commitment or love. This attention to detail inherently has a natural limit to quantity and speed of production. The introduction of the machine decreased this skill of responsibility because it increased the speed and quantity of work. By increasing quantity, the machine exceeded the inherent limits of time necessary for detail and quality. Without the time to observe and commit to detail, the negative effects of the machine became unnoticeable. Machines and all their progeny of modern technology “impose no natural restraint or moral limit on our behavior” (Berry, 93).

Transcendence

The ancient spiritual yearning in human nature has been to transcend our limits. Our tireless search for infinite energy, perfect efficiency, and freedom from suffering has underscored the entire history of scientific innovation. No evidence exists however that “transcending these limits through technology, lies within our reach *or our responsibility*” (Berry, 90). Our continued attempt to satisfy this hunger through “infinite growth and infinite consumption” (Berry, 91) only diminishes the very source of our survival and renewal - the land. We have failed to see that our spiritual hunger for transcendence can only be satisfied through the body, through the cultivation of the earth, not beyond it.

Resurrection

This divide which separates the spirit from the body is ‘a geologic fault’ which started in religion but now runs through the scientific and “secular mind right into the physical earth” (Berry, 108). This crack is not being created “by intention or accident - but because, occurring in the Creation that is unified and whole, it must” (Berry, 109). The soul, in its loneliness, yearns for salvation. Yet salvation does not have to mean *freeing or separating the spirit* from worldly suffering. Berry prophetically writes: the Bible's aim,

as I read it is that soul and body “cannot be divided; their mutuality, their unity is inescapable; they are reconciled not in division, but in harmony. What else can be meant by the *resurrection* of the body?” (Berry, 109) Salvation is not the transcendence of the spirit *from* the body, but rather the continual resurrection of the body *through* the spirit.

Choice

We are at a point in which we will have to “choose and learn to live within the limits of the human definition, or not live at all” (Berry, 94). Our knowledge and skill of these limits, and how to live within them, our cultural restraint, is the “most comely and graceful knowledge that we have, the most healing and the most whole” (Berry, 94) In the words of Ivan Illich: “can we, *believing* in the effectiveness of power, see the disproportionately greater effectiveness of abstaining from its use” (Berry, 95)?

Service

Humanity must learn to accept itself for what it is and not for what it wants to be. We cannot transcend ourselves by extending outside of our human limitations, or by attempting to overpower the nature around us. Thereby we only strengthen the very barriers of separation and isolation which we are trying to break out of. We can transcend ourselves only by humbling ourselves to the service of our place and time. It is only in service of wholeness, holiness and sacredness of creation that we are given a chance to become a part of something unimaginably greater than we could ever become alone - as individuals or as humanity.

VIII. Conclusion

Summary

Through this paper I have attempted to explore and describe the inherent connections between farming and music. By searching for the practice of ‘cultivating wildness,’ I have found many doors and connections linking the concepts of human and nature, body and spirit, health and wholeness, wildness and sacredness. My main objective throughout has been to suggest because of the inherent unity between human and nature, body and spirit and wild and sacred, it only follows that music and farming, as the cultivation of the

substance and essence of life, are also one. Both are required in the cultivation of wildness, in the preservation of life.

Paradox

Ultimately, it is in the practice and skill of responsibility that art and farming touch each other. Art as the cultivation of the spirit is dependent on farming not only in a physical sense, art requires agriculture in order to remain relevant to life. In the same way, agriculture needs art in order to communicate and express the skills of responsibility, as a way of keeping wildness alive, as an antidote to mechanization. It is only in their mutual existence that farming and art can cultivate wildness. Like the energies of life and death and day and night, art and agriculture cultivate and preserve wildness in their polarity and contradictoriness. It is in their opposition that farming and music acknowledge the mystery of life. The paradox between them creates the space for sacredness to dwell.

Mystery

Ultimately however, I realize that I know no more now than when I started. All that is clear is that this question will remain a mystery – because it is a mystery not to be solved. If I could put my finger on it I would stop searching. Life is a mystery and a miracle. It is wild and yet we wish to cultivate it. In cultivating life, in learning to cultivate wildness, we learn to become who we most fear - human – ourselves.

Humility

By acknowledging the seemingly unrelated aspects of life (such as music and farming), we acknowledge the inter-connectedness of life. We acknowledge that there are some things which are beyond our explanation and understanding. We become humble to the realization that there are some things which we can ultimately only know as sacred mysterious. This is the wisdom that teaches us that “life is a miracle” that we can never fully understand. What this mystery gives to humans is humility. In our approaching global crisis, this humility might become the most important factor in learning to preserve life. After all, it is *not* through our own powers and knowledge that life is born or preserved. It is not in pride or fear that we can preserve life, but only in humility and reverence.

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