ON THE POSSIBILITY, NECESSITY, AND PRACTICABILITY OF LEOPOLD'S LAND ETHIC

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

MAHMUT ÖZER

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY
IN
THE DEPARTMENT OF PHILOSOPHY

JANUARY 2012

Approval of the Graduate School of Social Sciences

Prof. Dr. Meliha Altunışık
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Doctor of Philosophy.

Prof. Dr. Ahmet İnam
Head of Department

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Doctor of Philosophy.

Prof. Dr. Ayhan Sol
Supervisor

Examining Committee Members

Prof. Dr. Yasin Ceylan	(METU, PHIL)	
Prof. Dr. Ayhan Sol	(METU, PHIL)	
Prof. Dr. Ahmet İnam	(METU, PHIL)	
Prof. Dr. Hasan Ünder	(Ankara University)	
Assoc. Prof. Dr. Ufuk Özdağ	(Hacettepe University)	

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last name : Mahmut Özer

Signature :

ABSTRACT

ON THE POSSIBILITY, NECESSITY, AND PRACTICABILITY
OF LEOPOLD'S LAND ETHIC

Özer, Mahmut

Ph.D., Department of Philosophy

Supervisor: Prof. Dr. Ayhan Sol

January 2012, 234 pages

In this work, I scrutinize Leopold's land ethic and Callicott's interpretation of it both from normative and meta-ethical perspectives by making textual and conceptual analyses. Leopold suggests that an ethic which makes us responsible for the protection of whole nature is evolutionarily possible and ecologically necessary. Callicott tried to buttress Leopold's land ethic by developing a nonanthropocentric axiology and some meta-principles. Moreover, in his view, Leopold's views are not only compatible with nonanthropocentric axiology but also imply it. I show that Leopold did not build the land ethic on nonanthropocentrism and he did not enforce attribution of intrinsic value to nature and its constituents. I argue that weak anthropocentrism is quite compatible with Leopold's views, and it provides a way to maintain normative power of land ethic without being ecofascistic. Furthermore, I discuss that Leopold might not have objected attribution of intrinsic value to nonhuman beings although he primarily referred to instrumental values of nature. Moreover, I argue that Leopold preferred a middle position between the concepts of preservation and conservation. As a man of practical wisdom Leopold has always tried to find middle and practicable ways between opposing extremes to harmonize human realm with nonhuman one and to grow the embryo of the conservationist movement. Finally, I argue that Leopold's land ethic is a human ethic which requires human moral agents to accept responsibility for protecting whole nature in order to attain good life.

Keywords: Land ethic, Leopold, Callicott, anthropocentrism, good life.

ÖZ

LEOPOLD'UN TOPRAK ETİĞİNİN OLABİLİRLİĞİ, ZORUNLULUĞU VE UYGULANABİLİRLİĞİ ÜZERİNE

Özer, Mahmut
Doktora, Felsefe Bölümü
Tez Yöneticisi: Prof. Dr. Ayhan Sol

Ocak 2012, 234 sayfa

Bu çalışmada, Leopold'un toprak etiğini ve Callicott'un toprak etiği yorumlarını, metin ve kavram çözümlemeleri yaparak, hem normatif hem de meta-etik bakış açılarıyla inceliyorum. Leopold, tüm doğanın korunması için bizi sorumlu kılacak bir etiğin, evrimsel açıdan mümkün ve çevrebilimsel açıdan zorunlu olduğunu belirtmektedir. Callicott, Leopold'un toprak etiğini insanmerkezci olmayan bir değer kuramı ve birtakım meta-ilkeler geliştirerek güçlendirmeye çalışmıştır. Callicott'a göre, Leopold'un görüşleri insanmerkezci olmayan bir değer anlayışıyla uyuşmakla kalmaz aynı zamanda böyle bir anlayışı gerektirir. Leopold'un toprak etiğini insanmerkezci olmayan bir anlayış üzerine kurmadığını ve doğa ve bileşenlerine özsel değer yüklenmesini zorunlu kılmadığını gösteriyorum. Zayıf insan merkezci bir etik anlayışın Leopold'un görüşleriyle uyumlu olduğunu ve böyle bir anlayışın toprak etiğinin normatif gücünü korurken, onu ekofaşizm suçlamasından bağışık kılacağını savunuyorum. Ayrıca, Leopold'un, esas olarak doğanın araçsal değerleri üzerinde durduğu halde, insan dışı varlıklara özsel değer yüklenmesine karşı çıkmayabileceğini savlıyorum. Bunlara ek olarak, Leopold'un doğanın insan için mi yoksa kendi için mi korunması gerektiği tartışmasında uzlaştırıcı bir orta yol tercih ettiğini savunuyorum. Bir pratik akıl insanı olarak, Leopold, insanların ve insan dışı varlıkların dünyaları arasında uyum sağlamak ve henüz bir cenin olarak gördüğü doğa korumacılığı hareketini büyütmek amacıyla, karşıt uçlar arasında uygulanabilir orta yollar bulmaya çalışmıştır. Son olarak, Leopold'un toprak etiğinin, ahlakın öznesi olan insanlardan tüm doğayı koruma sorumluluğunu kabul etmelerini iyi yaşam hedefine ulaşmak için isteyen bir insan etiği olduğunu tartışıyorum.

Anahtar Kelimeler: Toprak etiği, Leopold, Callicott, insanmerkezcilik, iyi yaşam.

For My Mother and Father

ACKNOWLEDGMENTS

I express my gratitude to my supervisor Prof. Dr. Ayhan Sol. He introduced me the land ethic and suggested me to write on it. Without his mentorship I might not be able to complete this work.

I would like to thank to Prof. Dr. Ahmet İnam, Prof. Dr. Yasin Ceylan, Prof. Dr. Hasan Ünder, and Assoc. Prof. Dr. Ufuk Özdağ for kindly accepting to be members of the thesis committee.

Many thanks to my friend Hasan Çağatay. He was always ready to help whenever I was in trouble in computer usage or word processing. More importantly, he kept me mentally alert by bringing forward interesting questions and arguments.

Finally, I owe a lot to my parents, friends and relatives who constantly supported and encouraged me to finish off the work.

TABLE OF CONTENTS

PLAGIARISM.. iii
ABSTRACT.. iv
ÖZ.. v
DEDICATION.. vi
ACKNOWLEDGMENTS.. vii
TABLE OF CONTENTS.. viii
CHAPTERS
1. INTRODUCTION.. 1
2. IS LEOPOLD NONANTHROPOCENTRIST OR ANTHROPOCENTRIST? 12
2.1. Anthropogenic Impact on Nature and Anthropocentrism.............................. 15
2.1.1 The Human Impact.. 15
2.1.2. Questioning the Role of Anthropocentrism on Environmental Degradation.. 17
2.2. Is Leopold Nonanthropocentrist? 20
2.2.1. Realizing the Necessity of Philosophy and Holistic Conception of Nature.. 20
2.2.2. Does Holistic Conception of Nature Lead Leopold to Nonanthropocentrism? 24
2.2.3. Leopold Is Not Nonathropocentrist.. 30
2.2.3.1. Leopold's Conception of Carrying Capacity for Human and Nonhuman Beings.. 36
2.2.3.2. Leopold's Concern for Future Generations.............................. 39
2.3. Moral Agency and Moral Considerability.. 43
2.3.1. Moral Considerability and Moral Agency of Human Beings.............. 43
2.3.2. Moral Considerability of Nonhuman Beings by Human Moral Agents.. 49
2.4. Land Ethic As a New Moral Contract.. 54
2.4.1. How Are Ethics Evolving? 54

2.4.2. Leopold's Theory of Three Staged Evolutionary Ethics and Necessity of the Land Ethic as a New Moral Contract 62
2.5. Significance of Raising Consciousness about Nature 68
2.6. Conservation under Human Dominance 75
2.7. Does Leopold's Environmental Holism Imply "Ecofascism?" 81
3. VALUE OF NATURE AND CONSERVATION 88
3.1. Values of Nature 90
3.1.1. Recreational Value of Nature 90
3.1.2. Scientific Value of Nature 92
3.1.3. Value of Biodiversity 93
3.1.4. Economic and Capital Value of Nature 93
3.1.5. Value of Nature as Resource 94
3.1.6. Scarcity Value and/or Aesthetic or Artistic Value of Nature 95
3.1.7. Cultural Value of Nature 97
3.1.8. Replacement Value of Nature 99
3.2. "Conservation Esthetic" 102
3.2.1. Trophy-Value 104
3.2.2. Scarcity Value of Nature 108
3.2.3. Value of Fresh Air and Change of Scene 108
3.2.4. Value of Perceiving and Understanding Nature 109
3.2.5. Husbandry as a Way of Getting to Appreciate Aesthetics of Nature 109
3.3. Callicott's Conception of Intrinsic Value 111
3.3.1. Analogy of Parent-Child and the Concept of Truncated Intrinsic Value 112
3.3.2. The Concept of Intrinsic Value Inspired from the Quantum Theory 114
3.3.3. Extension of Intrinsic Value from the Self to Nature 118
3.3.4. Teleological Proof 119
3.3.5. Phenomenological Proof 121
3.4. Value, Good, Good Life, and Normativity 125
4. IS LEOPOLD PRESERVATIONIST OR CONSERVATIONIST? 131
4.1. Conceptual Distinction between Preservation and Conservation 132
4.1.1. Passmore's Distinction of Preservation from Conservation 132
4.1.2. Pinchot, the Conservationist, and Muir, the Preservationist 132

4.1.3. Callicott's Hesitancy about Leopold's Preservationism or Conservationism 133
4.2. Leopold's Position in His Early Works 143
4.2.1. Leopold as Game and Land Manager, and Lover of both Nature and Progress 143
4.2.2. Leopold's Revision of Pinchot's Principle of Highest Use 145
4.2.3. Industrial Progress vs. Wild Life, and Reconciliation 147
4.2.4. Destruction and Spiritual Value of Wilderness, and Leopolds Recognition That Reconciliation Is on a Knife-Edge 149
4.2.5. From "Highest Use" to "Good Balance" 153
4.3. Leopold as a Sportsman and "Intergrade" and His Conception of Conservation as a Whole 155
4.3.1. Leopold's Love for Hunting and Game Management as a Part of Conservation 156
4.3.2. What Does It Mean To Be an "Intergrade?" 157
4.4. Leopold's Conception of Conservation or Preservation in His Later Works 161
4.4.1. Conservation as Harmony between Man and Land 163
4.4.2. Conservation as the Effort To Protect Our Benefits That We Get from Nature 165
4.4.3. Conservation as "Preservation" of Utility and Beauty of Land 166
4.4.4. Conservation as the State of Health in the Land Organism 171
4.4.5. Distinction between Conservationists and Conservation Practices 176
4.4.6. Some Ambiguous Usages of "Preservation" and Reasons for "Preservation" 180
4.4.6.1. What Does Leopold Mean by "Preservation?" 181
4.4.6.2. Why Should We "Preserve?" Why Did Leopold Want To "Preserve?" 185
4.4.6.3. Good Life 188
4.5. Norton's Conception of Preservation and Conservation, and Leopold the Intergrade 191
5. CONCLUSION 196
REFERENCES 208

APPENDICES

A. TEZ FOTOKOPİSİ İZİN FORMU.......... 216
B. TURKISH SUMMARY.......... 217
C. CURRICULUM VITAE.......... 234

CHAPTER 1

INTRODUCTION

I

"If there is at all any moral *life* in a person and not merely moral routine, then a significant part of that life consists in *coming to learn* the scope of the responsibility which he has already accepted" (Fingarette, 1967, p. 43, Fingarette's emphasis). With this concise and eloquent statement, Herbert Fingarette does not only underline one of the most crucial aspects of morality, namely responsibility, but also points out a way to see whether one has really accomplished a moral life. Thus, my awareness as to how responsible a person I am and as to what extent I accept responsibilities in my life might be a good measure of testing moral value of my life.

Most of us are reluctant to accept "extra" responsibilities, other than those we cannot avoid. Most of us do not escape from the responsibility for our families. Many of us do also care for our friends, or for our relatives, or perhaps for our neighbors. Sometimes, for instance in the case of a disaster, we also care for our distant citizens. But we, in general, are more indifferent to people far from us than to ones closer to us. No doubt we feel pity for the people who suffer from starvation, or from a disaster in a distant country. But, frankly, we do not seem to accept responsibility for them, at least as much as we accept for our family members, or for our friends, or at most, for our citizens. But there are people, although not many, who sincerely care and who accept further responsibilities other than themselves, for the people with whom they are not acquainted, even for entities other than human beings, for animals and plants, or even more, for rivers, lakes, seas, mountains, forests, and so forth.

Human beings, relatively weaker and needy creatures in nature, especially immediately after they were born, have struggled a lot to accomplish to consolidate their survival as a species. After thousands of years of struggle, they have not only achieved mere survival, but also have grown an arrogant confidence to realize the so called aim of mastery of nature.

During this struggle, the history has not only witnessed their “mastery” of other species in nature, but also of their own species members as well, through various mechanisms, such as slavery, or by means of various other forms of apparatuses, applied more extensively and violently especially after the emergence of nation states, such as wars, massacres, tortures...

In the end, we, human beings, have achieved, more or less “comfortable life,” at least on the average, notwithstanding wars, massacres, murders, tortures, and other crimes going on here and there. Nevertheless, some of our species members have drawn attention to the fact that mastery of nature have turned out to be tyranny of nature, a tyranny which remains blind to extermination of thousands of species and destruction of nature due mainly to anthropogenic reasons. Today, it is undeniable a fact that predominance and present way of living of human beings in nature was constantly disrupting nature and its nonhuman constituents. Some have warned us that we should no more pursue the malignant aim of mastery of nature, rather we had better learn to live in harmony with nature. Some others have advocated that other animals, too, like ourselves, have their own rights, and that we have to observe not only rights of humans, but also of animals. But some have even gone further, and claimed that observing the rights of humans and animals only will not do. Unless we understand that animals, including humans, are part of nature, and that we have to extend the scope of our responsibility to the protection of whole nature, and that we must stop abusing nature, we, together with nature, might be seriously harmed, or even doomed. And we would be morally deficient unless we realize our duties to nature properly. For we have been warned and informed enough, especially by environmental scientists and philosophers for quite a long time.

II

Aldo Leopold, in a time industrial progress was the sublime goal, uttered plainly, most probably the first time, that the scope of our responsibility must be extended to the protection of whole nature or the land, including not only living beings in it but also all constituents of it in general, such as soils, waters, marshes, etc.

Leopold was not a man of just a single profession. He was a scientist, but he was not a scientist who worked under a single discipline, nor was he a scientist who closed himself only to a laboratory work. First of all he was a forester. After graduated from Yale Forest School as

Master of Forestry in 1909 he joined U.S. Forest Service and worked in many places of U.S. until he returns back to the University of Wisconsin as the chair of game management in the Department of Agricultural Economics in 1933. In 1939 Leopold became the chairman of a new Department of Wildlife Management in the same university. Within these years, he worked hard. He was incredibly productive and creative, in spite of some serious health problems he suffered. He acquired immense experience and knowledge while he was working in U.S. forests. He also studied in U.S. Forest Products Laboratory for three years. He led many projects about game, land, and wildlife management. He contributed to the establishment of Wilderness Society and Wildlife Society. He also carried long term studies in Germany and Mexico. He edited journals, wrote books, hundreds of articles. He was able to talk and write on many disciplines with great competence. As one can see in his writings, he did not write only on forestry, or on game and wildlife management, which are main subjects of his professional life. Besides these fields, he also wrote on ecology, agriculture, biology, ornithology, economics, and ethics. When he wrote on a subject, he did not limit himself to that very subject. When he saw a relation with other areas he did not hesitate to express his views on them. His views were as challenging, inspiring and deeper as when he wrote on disciplines other than forestry, game and wildlife management (Flader and Callicott, 1991a, pp. xiii-xv).

In the present dissertation, I will especially concentrate on his renowned land ethic. Leopold urged humanity to achieve the third step in the evolution of ethics. In his conception, ethics has evolved in three stages. In the first two stages we have learned how to regulate our relations between individuals and between the individual and society. Now, he challenges that there is a need for an ethic which deals also with our relations with nonhuman members of nature. If we can succeed, it will be the third stage in the evolution of ethics. And in his view, this is not only a mere possibility, but also necessity to which we are compelled by ecological circumstances.

In other words Leopold invites us for the establishment of a new ethic, an ethic which could tell us distinguishing right from wrong not only in human-to-human conduct but also in human-to-nature one. As we call distinguishing right from wrong, in general, conscience, Leopold calls distinguishing right from wrong, in human-to-nature conduct, “ecological conscience.” In his view, we, humans, need to form an ecological conscience more than we need to enact obligations through positive laws in order to move ourselves to resolve environmental problems.

III

Leopold's views have greatly influenced J. Baird Callicott who has dedicated himself to make the land ethic known worldwide and establish philosophical foundations of the land ethic. Actually, as he says, he got to know Leopold's land ethic somewhat by chance. In 1971, he was preparing to teach the first environmental ethics course in the world. While he was preparing for the course, one of his former students suggested him to read Leopold's posthumously published *A Sand County Almanac* (hereafter the *Almanac*). He has used many different texts from various authors in his environmental ethics courses since then, but the *Almanac* would always remain "at the core of [his] curriculum" of his environmental ethics courses and his worldview in the subsequent years (Callicott, 1987, pp. vii-ix).

What Callicott has tried to do, in a nutshell, is to buttress, synthesize, or harmonize, Leopold's views with Hume's and Darwin's conception of ethics and with some inspiration from quantum theory. What he wants to attain, in the end, is an autonomous environmental ethics which is based on nonanthropocentric axiology.

Callicott, like Leopold, is a proponent of Darwin's theory of evolution. And he believes, again like Leopold, ethics is subject to evolutionary development. Furthermore, having been influenced and inspired by Hume, Callicott affirms that ethics has its energy from feelings or sentiments which might be excited and informed by reason. He believes that inception of ethics precedes the inception of reason and social life in the course of evolution of *Homo sapiens*.

Callicott is aware of the fact that Humean axiology "is not non-anthropocentric," but he argues that "the Darwin-Leopold environmental ethic, grounded in the axiology of Hume, is genuinely and straightforwardly non-anthropocentric" (Callicott, 1984, p. 305). In other words, although Humean emotivist ethic is a human ethic, i.e., an ethic which aims at regulating human-to-human conduct, Callicott believes that its principles, together with the principles of Darwin's theory of evolution, can be harmonized with Leopoldian land ethic to establish an autonomous environmental ethic, i.e., an ethic which will regulate human-to-nature conduct. In his view, the feelings and sentiments we have are not only the ones which urge us to protect ourselves, we also have feelings and sentiments toward other creatures, toward whole nature. He states that "altruism is as fundamental and autochtonus in human nature as is egoism" (Callicott, 1989c, p.

85). Furthermore, ecology and environmental sciences continuously supply us with new information about nature. So we should no more escape the duties urged by our sentiments which are amplified by this information flood.

In this sense, Callicott believes that Humean "is/ought" barrier may not bar the justification of the land ethic. Through the process of natural selection, we are endowed with feelings and sentiments which involve altruism no less than egoism. Thus, we have an "interest in human life, health and happiness" (Callicott, 1989d, p. 123). Ecology and other environmental sciences have shown us "that organic nature is systemically integrated, … that mankind is a non-privileged member of the organic continuum, and … that therefore environmental abuse threatens human life, health, and happiness" (p. 123). Consequently, "we ought not violate the integrity and stability of the natural environment by loading it with hazardous wastes or by extirpating species, upon which its vital functions depend, or by any other insults or dislocations" (p. 123). Callicott admits that this argument is not logically valid, if one insists on applying strict rules of deduction; but he believes that it is not altogether unfounded, either. It discloses the interplay between sentiments and reason. Our ethical judgments come out as a consequence of this interplay. Our feelings, sentiments, passions motivate us to act to do something, but they are not totally unbounded. Our faculty of reason, armed by scientific knowledge, can have an influence on our feelings, and hence on our deeds. In other words, Callicott, like Leopold, seems to favor a naturalistic approach to support his ethical views.

Furthermore, Callicott constantly underlines holistic character of the land ethic, perhaps much more emphatically than Leopold did. As he points out, "holism is the land ethic's principal asset" (1999c, p. 69). Land ethic does not deny rights of individuals, but it does not entrap itself between the boundaries of individualism or anthropocentrism. The holistic character of the land ethic has its resources from ecology. Callicott underlines that "[e]cological relationships determine the nature of organisms rather than the other way around. A species is what it is because it has adapted to a niche in the ecosystem." In other words, constituents of the whole are formed and determined by and dependent on the whole, more than vice versa (1989c, p. 87).

IV

As we will see in the subsequent chapters, Leopold requires us to come to understand and appreciate the value of the land, with his words in the *Almanac*, "value in the philosophical sense" (1966, p. 261). Callicott believes that, by this locution, Leopold must have meant intrinsic value rather than instrumental value of the land. For, in Leopoldian land ethic, human beings are required to respect, love, and even admire the land. Hence the land must have a higher value than mere use value. As it will be seen in Chapter 3 in more detail, Callicott devotes a considerable effort to show why there exists something we call intrinsic value, at least in some entities, and especially in nature in its totality, and why the land, the biotic community, is intrinsically valuable.

Callicott imagines having an environmental ethic which is perfectly autonomous, rather than having an applied ethic which is subordinate to extant human ethics, or an ethic which is an extension of human ethics. To do this he thinks that he needs to have a nonanthropocentric value theory which assumes attribution of intrinsic value to nature as a whole, and to nonhuman members of it (1984, p. 299).

I thought, at the outset, that attribution of intrinsic value to nonhuman members of nature would add a great strength to land ethic, if this can be really justified. However, I was especially and always doubtful about Callicott's insistence on a nonanthropocentric environmental ethic since I have been acquainted with environmental ethics in general, with land ethic and interpretation of it by Callicott in particular. For I thought that it would hardly be possible to convince human moral agents to accept a new ethic which puts new limits to their freedom, and which may also restrict some of their interests and desires for the sake of nonhuman members of nature. I thought that such an ethic would not be powerful enough to make moral agents to act in accordance with the precepts this ethic posits.

V

I have been acquainted with the land ethic first through the works of Callicott. But, after I have read about more than a dozen of articles by Callicott, compiled in his 1989 and 1999 books, I strived to read the uncolored, original version of the land ethic from Leopold. Because I wanted to know what Leopold, the founder of the land ethic, was telling about what Callicott especially

underlines, namely nonanthropocentrism and intrinsic value attribution to nature. I was charmed by the holistic outlook of land ethic, namely that we need to take into account nature as a whole, if we really want to overcome environmental problems we are faced with. However, I was not convinced about Callicott's conception of intrinsic value and nonanthropocentrism. As I said above, I thought, at the outset, that it would greatly increase the normative power of land ethic, if it is possible to have a sound axiology which makes human agents acknowledge intrinsic value of nature and its constituents. As we will see in Chapter 3 in more detail, Callicott devoted his time to justify intrinsic value of nature and of its members. However respectable his efforts are, I thought that he had not come up with a full-fledged theory of intrinsic value, unlike he seems firmly convinced that he did. I wondered whether Leopold had a concept of intrinsic value. How did he justify necessity of the land ethic? Did he really mean intrinsic value, by "value in the philosophical sense," as Callicott says? Secondly, and more significantly, I wanted to know whether Leopold was defending a nonanthropocentrist environmental ethic, as Callicott alleges.

As I stated above, I agreed with Callicott that environmental ethics should be holistic, that it should aim at taking care of whole nature rather than this or that species only. But I was also thinking that such a holistic ethic might not be put into practice effectively unless it is somewhat human-centered. Most of us have been accustomed to conceive nature and most of its members as resources for human well being for thousands of years. I realized that this conception was one of the reasons for the present deterioration of nature, but I also realized that we would overcome this problem only with the conscious acts of human moral agents, if we, human beings, would continue to survive. As we will see in Chapter 2, I also realized that we cannot, and presumably should not, forgo many human acts which are done basically for human well-being, even though many of these acts may not contribute to the protection of nature. Thus I considered that an ethic which says to its agents that you should limit your freedom, satisfaction of your interests, needs, and desires for the good of nature and its constituents, should also say emphatically that protection of nature is for the good of humanity.

With these thoughts in mind I went through the works of Leopold. Callicott and other philosophers were usually referring to the *Almanac*, and especially to the section "The Land Ethic" in the *Almanac*. At the beginning I thought that the *Almanac* was the only written work of Leopold published, and "The Land Ethic" was the only philosophically significant part. Then I began to study the *Almanac*.

The *Almanac* strikes its reader first with its beautiful literary style. But as one goes through it, s/he can see that it is not just a literary work which is composed of observations of a sensitive man about nature. As much as it is a precious work of art which is carefully and sensitively woven with lovely metaphors, analogies, and rhetorical descriptions, the *Almanac*, is also a scientific and philosophical work, and its theses and arguments are still inspiring and enlightening many scientists and philosophers who wonder about the course of life in our world.

I read the *Almanac* several times. In every reading I realized that I was learning something new and more. Furthermore, I began to think that there was some discrepancy between some of Leopold's views and Callicott's interpretation of them. So, I wondered whether I could find other works from Leopold if there was any. While I was researching I saw an article from Bryan G. Norton, "The Constancy of Leopold's Land Ethic" in which the author was arguing that Leopold might be closer to a longsighted anthropocentrism rather than nonanthropocentrism by resting on three earlier works of Leopold besides the *Almanac* (Norton, 1988). This work kindled the fire for me to study Leopold in more detail. If Norton was right, Leopold might have already seen the impracticability of a nonanthropocentric environmental ethic.

I searched through the internet to find the works of Leopold cited by Norton, but failed to get free access to any of them. But I fortunately found two books edited by Callicott, Susan Flader and Eric T. Freyfogle (Flader and Callicott, 1991; Callicott and Freyfogle, 1999). More than a hundred works by Leopold were compiled in these two books. This, for me, was something like finding an oasis in the desert. So I have quenched my thirst working through Leopold's works for a reasonable period. And in the end, I decided to draw a picture, which is modest but quite different from Callicott did. One of the objectives of the present dissertation is to reveal some aspects of Leopold's land ethic that I believe that Callicott underemphasized.

According to Callicott, Leopold is the prophet and the *Almanac* is the bible of conservation movement (Callicott, 1999d, p. 91). However, I believe that Leopold was a more practical, more worldly-wise a man. I will try to indicate his worldly wisdom as opposed to his alleged prophecy. Furthermore, in my opinion, taking Leopold as the prophet and the *Almanac* as the bible of conservation is not proper and does not comport with the overall conception of Leopold's land ethic. First of all, such an evaluation is not compatible with Leopold's own conception of evolution of ethics. Precepts and principles of land ethic are not revelations or

verses whispered to Leopold by a divine being. As Roderick Nash rightfully points out in his contribution to *Companion to A Sand County Almanac,* it would be unfair of us if we do not take into account the intellectual treasure preceding Leopold (Nash, 1987). Leopold no doubt is the founder of land ethic. And as Callicott rightfully states, he is the forerunner of environmental ethics (Callicott, 1989f, p. 239). But I personally believe that he would prefer that the land ethic he matured was taken as an outcome of quite a long evolutionary process. Indeed, did not he say that land ethic is an evolutionary possibility and ecological necessity (1966, p. 239)? Thus I also want to illustrate that Leopold has worldly, concrete suggestions to show human beings why they should act for conservation purposes. Although one may find some prophecies in his thoughts which are frequently expressed in beautiful literary style, he is more like a scientist and philosopher than a prophet, and his works rest on more scientific evidence and philosophical arguments than religious or mystical sayings.

Callicott is presumably the most important figure in making land ethic renowned, discussed and respected worldwide. He did not only make land ethic known in all over the world or contribute to it with his books and articles, but also tried to reshape and bolster it in a way somewhat different from that it was done by Leopold himself. He wanted to strengthen and synthesize Leopold's land ethic with the views of Hume, Darwin, Adam Smith, and finally with some inspirations from quantum physicists. He wanted to have environmental ethics as an autonomous discipline and he believed that this autonomy could be gained by attribution of intrinsic value to nonhuman members of nature as traditional ethics have done to human beings. But I cast doubt on his respectable attempts whether they are in conformity with Leopold's own vision and whether they can effectively resolve the problems which are aimed at.

VI

I shall try to figure out Leopold's position about the controversy between the concepts of anthropocentrism and nonanthropocentrism in Chapter 2. However devastating the human impact on nature is, blaming whole humanity, through the concept of anthropocentrism, does not seem helpful to resolve environmental problems. I argue in Chapter 2 that Leopold did not rest his land ethic on the concept of nonanthropocentrism. He realized the necessity for protecting whole nature rather than some parts of it, or some individuals or species in it. However, he was always cautious to take into account needs and interests of present and future human beings over

those of nonhuman constituents of nature. On the one hand, he rejected views which try to justify human reckless use of nature through attribution of special value to humans. On the other hand, however, he deliberately stressed some characteristics of human beings which make them superior over nonhuman beings. Nevertheless, he was also cautious to emphasize our capacities to accept responsibility for the beings other than ourselves rather than our abilities to dominate nature. Leopold suggested us a new ethic which requires us to enlarge the scope of our responsibility to whole nature. But he was quite aware that the agents of this new ethic are only humans, and thus pointed out that conservation could be achieved under the lead of human moral agents. Finally, in the last section of the chapter, section 2.7, I argue that holistic character of the land ethic does not make it ecofascistic, unlike some philosophers argued after Leopold, provided that it is weak anthropocentric.

In Chapter 3, I first try to expose Leopold's conception of value and conservation. In section 3.1, I give a long list of values that Leopold attributed to nature and its constituents. Next I try to analyze his conception of aesthetics of nature relying mainly on the section "Conservation Esthetic" in the *Almanac*. As I illustrate in the chapter, the values Leopold attributed to nature are heavily related with the needs, desires, taste, and interests of human beings. Furthermore, I scrutinize Callicott's conception of intrinsic value of nature and its members. I analyze five approaches that Callicott suggested in order to justify attribution of intrinsic value to nature and its nonhuman members. I argue that all these approaches have problems need to be resolved if they were posited as the nonanthropocentric value theory, or as the basis of autonomous nonanthropocentric environmental ethics. And in the final section of the chapter, section 3.4, I argue that Leopold could normatively justify moral considerability of nonhuman beings relying on the ultimate aim of good life without resorting to the concept of intrinsic value. Moreover, I suggest, as a compromise, that Leopold might not object to the attribution of intrinsic value to nonhuman nature, if he believed that this would contribute to growing the embryo of conservation movement.

In the fourth chapter, I first try to determine whether Leopold was conservationist, who would like to protect nature and its members for the good of present and future generations, or preservationist, who would like to protect nature from human intervention and in its pristine state for its own sake. And more importantly I argue that segregating nature lovers as conservationists and preservationists does more harm than good to conservationist movement. In

section 4.1, after distinguishing “preservation” from “conservation,” I draw attention to Callicott’s hesitancy related with Leopold’s position about preservationism or conservationism. He argues, on the one hand, that Leopold was preservationist even when he argued for the necessity of severe game and land management policies. On the other hand, however, he admits that preservationist policies are not realistic and impracticable. Furthermore, he suggests that “preserve” in the moral maxim of land ethic is unfortunate and should not mislead us to relate Leopold with preservationists. In the next three sections, I analyze Leopold’s works from the earlier ones to the later ones to determine his position throughout his whole career with respect to the concepts in question, and argue that Leopold was closer to conservationism than preservationism, if we insist to know that whether he is preservationist or conservationist. Furthermore, I also argue that good life rather than preservation of nature is the *summum bonum* of Leopold’s land ethic. And in the last section, being inspired from Bryan G. Norton’s analysis of these concepts, viz. preservationism and conservationism, I suggest that the artificial rift between preservationism and conservationism does not contribute to resolving environmental problems. Thus it is better to try to unite nature lovers rather than segregate them through artificial divisions, as Leopold would like to do.

CHAPTER 2

IS LEOPOLD NONANTHROPOCENTRIST OR ANTHROPOCENTRIST?

What can and should we do about nature which is manifestly disintegrating under human dominance? Edward O. Wilson points out that "[t]o choose what is best for the near future is easy. To choose what is best for the distant future is also easy. But to choose what is best for the near and distant futures is a hard task, often internally contradictory, and requiring ethical codes yet to be formulated" (1984, p. 123). What Wilson says in the final sentence depicts properly the predicament we are in. Today, we are in a situation that most of the human population, who live in the present, and probably who will live in the near future, may satisfy their needs without changing their life standards too much. But if our concern and awareness about nonhuman nature remains in its present level, we will presumably be leaving quite a poor world to posterity.

There is a widespread presupposition among human beings that all nonhuman nature is resource for human beings. It is further supposed that human beings have a privileged status among all other beings in nature. It is widely believed that nonhuman nature and myriad of beings in it need not to be considered morally unlike human beings are.

For several decades or so, however, these presuppositions have been extensively questioned, especially by environmental scientists and philosophers. Some prefer to subsume these presuppositions under a new concept called anthropocentrism. They argue that human centered point of view, or limiting moral concern only to human beings, has led to the environmental degradation we are in.

No doubt, there might be some truth in their claim. It is an undeniable fact that environmental problems we are in are mostly outcome of human activities. Thus we need to question these activities. And the concept of anthropocentrism performed its duty by highlighting that fact. But it has some weaknesses, too. First of all, it has a derogatory sense, and accuses all human individuals as if all of them have equal responsibility for the environmental problems we have. It equalizes responsibility of an industrialist, who refrains from taking necessary measures to

protect nature in order to make more profit, with that of a worker, who can hardly make his employer to take the measures. Thus, secondly, it conceals the mechanisms behind the anthropogenic impact. It is hopeless chimera to resolve these problems as long as the present capitalist mode of production continues its course.

Furthermore, we need to take into account other side of the coin, as well. As opposed to anthropocentric view point, which is wrong, should we endorse its opposite, nonanthropocentric view point, according to which all the constituents of nature, humans and nonhumans alike, should be respected equally? Needless to say, many activities of human beings directly and heavily contribute to the deterioration of nature. Many factories release various poisons into the air, soil, rivers and seas. Through industrial farming we continuously degrade the composition of soil. Anthropogenic desertification and deforestation, increase in human population, armament and nuclear pile-up have risen up to unprecedented levels. But on the other hand, not every human activity is that bad. Research projects in various disciplines are going on in universities or research centers in order to understand ourselves and nature better. Studies in medicine and other technological developments increase the quality and span of human life. Artists from different areas work to create works of art which improve our sense of beauty. Every year thousands of movies are produced to be shown all over the world. Thousands of concerts, exhibitions, plays are performed in fascinating halls, exhibition centers or theaters. Various local, national, or international meetings, conferences, congresses are organized in colossal convention centers. Frankly, many of these human activities do not contribute much to stop deterioration of nature. In the final analysis, they may even contribute to increase it. For we have to harm nature in order to build concert halls, theaters, movie studios, stadiums, gyms, convention centers, research centers, laboratories, even schools. We have to contribute to global warming when we go to holiday, join a meeting or a conference, or watch a play, concert, movie, or a match. Should we refrain from doing these manifestly human centered activities, too?

After the inception of environmental movement and environmental ethics, several reactions, or factions if you like, have emerged. Animal rights or animal welfare ethicists, or sentientists, or sentio-centrists argue, for instance, that we need to enlarge our scope of moral responsibility to include beings which seem to feel pain and pleasure like we do. Bio-centrists suggest enlarging moral concern to all living individuals on earth. Eco-centrists or land ethicists, however, argue for a more encompassing and holistic perspective. They suggest that enlarging our scope of

moral responsibility to include only nonhuman individual living beings will not be able to resolve environmental and ecological problems we are faced with. Therefore, in their view, if we genuinely take care of ecological problems we are in, we need to accept that whole nature, together with animals, plants, soil, water, air, etc. deserve moral consideration.

One, who is not happy with the existing course of the world, can argue against anthropocentrism and endorse one of the factions cited above. Thanks to the efforts of people who have "ecological conscience," many of us have surpassed the Aristotelian perception of nature according to which "plants exist for the sake of animals, ... other animals exist for the sake of man" (1995, Book I, § viii, 1256^{b} 16-17). But are we obliged to absolute nonanthropocentrism? Is it the most reasonable perspective to be endorsed in order to resolve environmental problems? Is it not possible to find a middle way between the strong anthropocentrism, which says that only human needs and interests matter, and utopian nonanthropocentrism, which amounts to, in its logical extreme, considering a bug, a mosquito or a cockroach, or any nonhuman member of nature, equally with a human being?

After asking the question that "[d]o other species … have inalienable rights?" Wilson suggests a reconciliatory compromise:

> There are three reaches of altruism possible from which a response can be made. The first is anthropocentrism: nothing matters except that which affects humanity. Then pathocentrism: intrinsic rights should be extended to chimpanzees, dogs, and other intelligent animals for which we can legitimately feel empathy. And finally biocentrism: all kinds of organisms have an intrinsic right at least to exist. The three levels are not as exclusive as they first seem. In real life they often coincide, and when in life-or-death conflict they can be ordered in priority as follows: first humanity, next intelligent animals, then other forms of life (Wilson, 2002, p. 133).

In my opinion, this is a good compromise which may unite conservationists from different quarters, such as environmental pragmatists who defend that a practicable environmental ethics should pay due concern for human interests, needs and values; animal liberationists or animal welfare ethicists who defend rights of animals besides of human beings, resting usually on utilitarian principles; and biocentrists, including deep ecologists and land ethicists, who defend protection of not only of some charismatic animals and humans but of whole nature.

A more concrete and somewhat anthropocentric suggestion also by Wilson is as follows:

> Today about 10 percent of the land surface is protected on paper. … [T]his amount is not enough to save more than a modest fraction of wild species. … Eventually, and the sooner the better, a higher goal can and should be set. At the risk of being called an extremist … let me suggest 50 percent. Half the world for humanity, half for the rest of life, to create a planet both self-sustaining and pleasant (p. 163).

I will argue in this chapter that Leopold, too, argued for such a middle way to reconcile human interests with those of whole nature or to obtain harmony between human beings and nature. This middle way is usually called weak anthropocentrism according to which human moral agents accept moral responsibility for nonhuman constituents of nature, but, as Wilson suggests above, humanity has priority over nonhuman beings and parts of nature.

2.1. Anthropogenic Impact on Nature and Anthropocentrism

2.1.1. The Human Impact

Charles Birch cites some striking statistical data which underline the impact of human species on earth:

- Topsoil disappears at the rate of one football field a second.
- Arable land is covered in concrete at the rate of three football fields a minute.
- Forests cover disappears at the rate of four football fields a minute.
- Species are estimated to disappear at the rate of one hundred per day (Birch, 2001, p. 1).

Furthermore, he gives a formula which calculates the anthropogenic environmental impact:

$$I=PAT$$

where I refers to environmental impact; P human population; A an index of affluence in terms of average person's consumption of resources; and T an index of technological influence in terms of average person's use of various technologies (p. 1).

Assuming the theory of evolution, human beings are not one of the oldest species emerged on this planet. Rather we, members of the species of *Homo sapiens*, are relatively new comers as compared to millions of species emerged in the billions of years of history of evolution. And not only scientific studies but also a simple glancing around show that the earth with human beings

and without them is incomparably different in terms of environmental change. Furthermore, this difference gets bigger and bigger as the human population, affluence and use of technology increase. Although species disappearance had already been occurring before the human species evolved, scientific data show that extinction crisis has incredibly augmented especially after industrial revolution. It is estimated that extinction rates are multiplied 100-1,000 times as compared to the times human technology was primitive yet, or before the human species became dominant species on earth (Sachs, 2008, p. 72). Edward O. Wilson states in his *Biophilia* that "[a] conservative estimate of the current extinction rate is one thousand species a year" (1984, p. 122). In the same work he also guesses that "[b]y the 1990s the figure is expected to rise past ten thousand species a year (one species per hour)" (p. 122). Thus what Wilson estimates about species extinction rate for 1990s is about 4 times lesser as compared to the estimation given by Birch in 2001. Nevertheless, in his *The Diversity of Life* published just eight years after *Biophilia*, Wilson revises his estimate, this time relying on more subtle calculations:

> [L]et me provide the most conservative estimate that can be reasonably based on our current knowledge of the extinction process. ... Even with … cautious parameters, selected in a biased manner to draw a maximally optimistic conclusion, the number of species doomed each year is 27,000. Each day it is 74, and each hour 3 (1992, p. 280).

Thus within less than a decade extinction rate of nonhuman species had been tripled, and got closer to the estimates given by Birch in 2001. Furthermore, in his *The Future of Life*, published in 2002, Wilson points out that if we do not take decisive measures for conservation "a fifth of the species of plants and animals would be gone or committed to early extinction by 2030, and half by the end of the century" (p. 102). What Wilson (1992) says in the following strikingly shows the human influence on the extinction of other species on earth.

> If past species have lived on the order of a million years in the absence of human interference, a common figure for some groups documented in the fossil record, it follows that the normal "background" extinction rate is about one species per one million species a year. Human activity has increased extinction between 1,000 and 10,000 times over this level in the rain forest by reduction in area alone. Clearly we are in the midst of one of the great extinction spasms of geological history (Wilson, 1992, p. 280).

Consequently, the data and the equation given by Birch above seem to indicate, unfortunately, but truly, the human impact on nature, and are worth pondering upon if we do care for the environment today and in the future. As Jeffrey D. Sachs (2008) rightfully states, acceleration of

species extinction is mainly due to anthropogenic reasons, and in fact, it is not much different than pushing "the others over the cliff" (p. 72).

2.1.2. Questioning the Role of Anthropocentrism on Environmental Degradation

The data given by Birch, and the unfortunate supporting evidence given by environmental scientists, have considerable normative power. These data clearly show that we, human beings, are recklessly devouring nature without taking into account what is happening to others with whom we share the same planet. Thus those of us who care about the future of life, or who are worried to leave a livable environment to future generations might be moved to do something to improve the data cited above.

It is widely argued that anthropocentrism is one of the main reasons behind the environmental impact. It should be pointed out, at first, that anthropocentrism, as a relatively new concept, provided an impetus to environmental movement. It has agitated many of us to question the impact of our species on nature. Thus as a concept, anthropocentrism, too, has quite a normative power.

But what might anthropocentrism imply? What are the reasons and motivations which promote anthropocentric or human centered world view? Does it truly describe the role of human individuals on environmental problems? Perhaps, anthropocentrism might be described shortly in a motto saying that "human beings first." Or as Tim Hayward (1998) defines, it might be the view which give "exclusive or arbitrarily preferential consideration to human interests as opposed to the interests of other beings" or those of environment or nature (p. 45). Thus anthropocentrism emphasizes value of human beings most among other species and entities existing on earth. When there arises a conflict of interest with beings other than humans we tend to favor our species members rather than others. As we are more prone to our family members with respect to strangers, we are more prone to our species members as compared to individuals from other species. Vast majority of us have some conviction that our species is much more valuable with respect to any other species.

On January 15, 2009, a plane accident occurred in the United States. The plane crashed into a flock of geese; and both engines were off. Nevertheless, the pilot achieved to land the plane in the Hudson River somewhat safely. Except a few injuries, everyone in the plane was saved. And

the pilot was unanimously called a hero. But, to my knowledge, no one has ever drawn attention to the birds died or wounded, or to the damage occurred in the river ecosystem. In one of the articles published after the accident in The New York Times, the heading was "No Human Casualties, but What About the Luggage?" (Wald and Wilson, 2009, February 9).

Could this event exemplify a form of anthropocentrism? Maybe it does. But, could this, perhaps excluding the view of the authors of the article in The New York Times, be the "anthropocentrism" which is said to be one of the main reasons of environmental problems? In my opinion, this sort of "anthropocentrism" seems natural. I do not want to say that whatever natural is good. Being somewhat environment friendly and a bit conscious of ecological problems I, perhaps "unnaturally and abnormally," had cared for the birds died and wounded and the damage in the river ecosystem occurred more than the luggage of the passengers in the plane. However, frankly, if some of my relatives or I were in the plane, I, too, would never remember the birds, or fish, or other nonhuman entities at all. But, I think, we should be able to afford this much priority for our species members, or anthropocentrism. It seems, for the time being, and for the near future at least, vast majority of human beings will continue to protect the interests of human beings over nonhuman ones, when there arises a conflict with the interests of the latter. But presumably, this is not the anthropocentrism which leads to environmental problems that human and nonhuman species suffer.

Furthermore, human species, we are told, have had an aim toward nature, namely mastery of nature, for thousands of years. We are not able to know how and when human beings had this aim. But we are beginning to understand that this aim is unfortunate and futile, even if humankind, at present, is the dominant species on earth. However, especially taking into account their relatively longer infancy, humans are physically weaker creatures as compared to many powerful predators with which they had to struggle for survival. But they are endowed with reason, one of the most important differentiae of the species. Hence, it is understandable that they had gone after such an aim to achieve survival in the midst of the wild life, even though this aim might have consolidated the view that "human beings first" in the course of time.

During their struggle with nature, needs and capacities of human beings have continuously changed and diversified enormously, incomparable with any other being on earth. This enormous change in needs and capacities has occurred considerably due to, and together with,

the changes in ways or modes of production. Nevertheless, especially after industrial revolution, that is together with the prevalence of capitalist mode of production, both production and consumption rates have risen to unprecedented levels. But neither the mode and means of production nor the resultant wealth and products have been evenly distributed all over the world. In the end, we have huge differences in the distribution of income, and we have affluence and famine together in the same world. However, for a few decades, we have begun to understand that the resources that our little planet provides us are not limitless. There are about seven billion people on earth now. It was estimated in 2001 that "human economy uses directly and indirectly some forty per cent of the terrestrial primary production of plant material produced every year" (Birch, 2001, p. 1). No doubt, human share would far outrun that ratio of forty percent, if every human being in the world consumed as much as that is consumed by citizens of developed countries on the average.

As we have injustice in distribution of resources among human beings, there is no less severe of it among millions of species and trillions of individuals belonging to those species. As merely one species among millions of species who need to use the resources of our little planet, our contribution on the injustice of distribution of the resources is undeniable and incomparable with any other species. Moreover, human population, production, and consumption continuously increase together with deforestation, erosion, and desertification of the land. Together with the increase in industrial production all over the world, not only the air we breathe and the water we drink are polluted but also global temperature is increased day-by-day which leads to climate change, one of the most alarming environmental problems, which deeply affects all life, human and nonhuman alike.

Therefore, it seems that the mastery of nature is "achieved" at the expense of the immense damage we have made in nature. Who is "the guilty" then? If we ask that which species is the most responsible for this sad result, then, we will find no species but humankind as responsible for the outcome. And if this is what anthropocentrism accusation imply, then we found what we have sought, namely "the guilty." But, how would this help us in resolving the problems we are in? What should we do now? If, humankind as a whole is held responsible for degradation of nature, does this really help us to resolve the problems we are faced with? Or does anthropocentrism imply that billions of human individuals from different socioeconomic strata and diverse cultural backgrounds melt into a monolithic character and act altogether always

maliciously and harmoniously to kill the life on earth? Is each of us really equally responsible for "the environmental impact?" Could we say in all conscience that a worker who works for subsistence is as responsible as an industrialist who owns the means of production and who recklessly tries to multiply his/her profit without taking into account the disruption the existing way of production leads to? I believe that s/he is not, and that neither is "the average person." Hence anthropocentrism, if it is understood in that sense, is a vague and rhetorical concept which might conceal the real mechanisms behind "the environmental impact." So, perhaps it is better to question the existing mode of production rather than to question the whole human species.

2.2. Is Leopold Nonanthropocentrist?

It is mostly believed that Leopold has a nonanthropocentric world view. I believe that J. Baird Callicott, who is the most devoted follower of Leopold, has played the major role in the growing of such a conviction. In this section, I will cast doubt on Callicott's conviction that Leopold has a nonanthropocentric world view. No doubt, it is possible to find a lot of evidence, in Leopold's works, which might support the claim that Leopold is a nonanthropocentrist. But as I will show, there is also sufficient evidence which shows that he prioritizes human interests over nonhuman ones.

2.2.1. Realizing the Necessity of Philosophy and Holistic Conception of Nature

Leopold begins his career as a forester in the U.S. Forest Service. As a young forester he believes that humans could manage nature and its constituents in conformity with their needs and interests. He is fond of hunting not only in his youth, but through his whole life. At first, he thinks that some predatory animals, such as wolves, lions, coyotes, foxes, were varmints which need to be fought "by means of a practical, vigorous, and comprehensive plan of action" in order to protect game and stocks (1915, p. 48). He believes that "everybody, except the varmints, [would] be benefited by such move" (p. 48). Needless to say, by "everybody," Leopold means human beings. To succeed in the "comprehensive plan of action" against "varmints" Leopold calls game managers, hunters and stock growers to unite. Furthermore, as a game manager and hunter, he freely talks about removal of number of various game in a year by humans (1918b, p. 57). For him, especially in these days, nonhuman species appear as mere resources to satisfy various human needs and interests.

Moreover, as a member of U.S. Forest Service, he is influenced by the utilitarian principles of conservationist Gifford Pinchot. Pinchot, who established U.S. Forest Service, defends that conservation policies have to aim at obtaining greatest good for as many people as possible. Leopold applauds Pinchot's principle of "highest use" as the principle which guides the management of natural resources in conformity with democratic spirit. He declares that it "is and must remain the guiding principle by which democracies handle their natural resources" (1921, p. 78). He suggests some revisions in that principle, though. But these revisions aim at taking care of diverse interests of various people who want to enjoy wildlife rather than the interests of nonhuman members in nature.

As his ideas about nature develops and deepens Leopold begins to see nature like a whole organism. He seems to be influenced by the ideas of Russian philosopher Piotr Demianovich Ouspensky while he was studying on nature. Leopold mentions Ouspensky with great respect, especially due to the latter's animist views. He approvingly quotes the following from Ouspensky's *Tertium Organum* which was published in 1922:

> Were we to observe, from the inside, one cubic centimetre of the human body, knowing nothing of the existence of entire body and of man himself, then the phenomena going on in this little cube of flesh would seem like elemental phenomena in inanimate nature (Quoted in 1923, p.94, cf. Ouspensky, 1922, p. 200).[1]

Animist conception of Ouspensky, which characterizes inanimate nature as a living whole, seems to pave the way, for Leopold, for the holistic depiction of nature, which we see in a much more mature form in "The Land Ethic."

> [I]t is at least not impossible to regard the earth's parts – soil, mountains, rivers, atmosphere, etc. – as organs, or parts of organs, of a coordinated whole, each part with a definite function. And, if we could see this whole, as a whole, through a great period of time, we might perceive not only organs with coordinated functions, but possibly also that process of consumption and replacement which in biology we call the metabolism, or growth. In such a case we would have all the visible attributes of a living, which we do not now realize to be such because it is too big, and its life processes too slow. And there would also follow that invisible attribute – a soul, or consciousness – which not

[1] Original words of Ouspensky as follows:

> Were we to observe, *from the inside*, one cubic centimeter of the human body, knowing nothing of the existence of the entire body and of the man himself, then the phenomena going on in this little cube of flesh would seem like elemental phenomena in inanimate nature (Ouspensky, 1922, p. 200).

> only Ouspensky, but many philosophers of all ages, ascribe to all living things and aggregations thereof, including the “dead” earth.
>
> … Possibly, in our intuitive perceptions, which may be truer than our science and less impeded by words than our philosophies, we realize the indivisibility of the earth – its soil, mountains, rivers, forests, climate, plants, and animals, and respect it collectively not only as a useful servant but as a living being, vastly less alive than ourselves in degree, but vastly greater than ourselves in time and space … (1923, p. 95, cf. 1966, pp. 190, 239, and 251-255).

From above, it is possible to draw some important themes which constitute the core of Leopold’s land ethic. First of all, Leopold takes nature as “a coordinated whole” all together with its “soil, mountains, rivers, forests, climate, plants, and animals,” as he does in “The Land Ethic.” Furthermore, Leopold refers to the old and well-known idea that nature is “a servant” for human beings. He points out that nature is not only “a useful servant” for us, but also it is a living being which is “vastly greater than ourselves in time and space.” In other words, nature provides necessary resources for our survival, but it is a whole which involves us besides innumerably many living and nonliving entities. That is to say, we are part of nature, and not its master, unlike it is wrongly supposed to be.

How does Leopold come to this point? As far as I know, Leopold (1923) is the earliest work in which Leopold touches upon moral and philosophical aspects of conservation in somewhat more detail. In previous works, and in the previous pages of this article, he concentrates more on the economic aspects of conservation than on the moral ones. He seems more as a land or game manager than a philosopher or an ethicist in these works. For him, as a land or game manager, and as a forester, sciences and scientific truths sufficed to realize “the highest use” doctrine of Pinchot. But after Leopold began to see that “highest use is a very varied use,” he also realized that sciences and scientific truths alone do not suffice to describe and resolve the problem of conservation (cf. 1921, p. 80). He presumably thought that sciences and scientific truths alone did not suffice to make people in general, and politicians and businessmen in particular, recognize the necessity of conservation and act accordingly. Sciences may show us the reasons of natural destruction, and may suggest some remedies. But unless we, the people, act to realize these suggestions, sometimes contrary to our immediate egotistic interests, the scientific truths have to stay imprisoned in books, articles or in the minds of scientists. Therefore, we need something more to make us move to realize the needs of conservation. That is why, Leopold needs to refer to the sayings of prophets (in 1923, Ezekiel, an in 1966 Ezekiel and Isaiah, cf.

1966, p. 239) and philosophers (e.g. Ouspensky, Kant and Ortega y Gasset). He does this presumably to find the moral stimulus which will enforce people, politicians, governors, etc. to act to save the environment. Furthermore, he needs to refer to "our intuitive perceptions," as a canon which might "be truer than our science," i.e., truer than the science which serves as "the sharpener of [humans'] sword" in their war against nature (cf. 1966, pp. 260-61). Apart from earlier works, Leopold, in this work (1923), acts not only as a mere scientist, or land or game manager, who tries to show the way for exploitation of nature for human purposes, but also as a philosopher, or ethicist, who tries to figure out the moral aspects of the problem.

Leopold goes on to stress the role of philosophy in grasping the significance of nature for us as follows:

> Philosophy, then, suggests one reason why we cannot destroy the earth with moral impunity, namely, that the "dead" earth is an organism possessing a certain kind and degree of life, which we intuitively respect as such. … [P]hilosophy also offers another and more easily debatable question: was the earth made for man's use, or has man merely the privilege of temporarily possessing an earth made for other and inscrutable purposes (1923, p. 95)?

Thus philosophy provides what sciences do not. What sciences assume to be "dead" is indeed "an organism possessing a certain kind and degree of life," as philosophers tell us. That is why, "we cannot destroy the earth with moral impunity." What we destroy is not something dead; it is a living organism in the whole of which we are a part. Furthermore, philosophy puts before us other questions to be answered. Do you think that this earth was really made solely for man's use? Or could it have been made for other purposes that we do not know for the time being, even if human beings have been given "the privilege of temporarily possessing [it]" (p. 95)? Thus Leopold implies that unless these kinds of questions, which the existing sciences do not much care to answer, are asked, and tried to be answered, we might not go too far in resolving environmental problems.

As far as this article concerned, by appealing to prophets, philosophers, and intuitive perceptions, Leopold tries to provide us, human beings, some significant moral stimuli to protect the environment. In this sense, he suggests accepting and fulfilling our responsibility for future generations. As he draws from the words of Ezekiel, the privilege of using the earth to satisfy our needs and desires makes us responsible to leave an alive and undamaged earth to posterity (1923, p. 94). Secondly, he suggests understanding nature as a living thing, together with its soil,

mountains, rivers, forests, climate, plants, and animals. Ouspensky and other philosophers provide us the means to conceptualize the earth as a living whole. Our intuitive perceptions help us to understand Ouspensky's animism. The earth is a large living whole including ourselves. We are part of nature. Although we are accustomed to use nature as a servant to satisfy our needs and demands, we need to understand that it is a big whole which involves billions of animate and inanimate beings including ourselves. This understanding, that nature is a living whole, which is suggested by philosophy, shows us that we cannot destroy nature "with moral impunity" (p. 95). In other words, not only human beings but also nonhuman nature might be morally considerable.[2]

2.2.2. Does Holistic Conception of Nature Lead Leopold to Nonanthropocentrism?

If earth is a whole organism and if we, human beings, are just a part of it, and if we are not masters of it, unlike we have supposed for ourselves for years, then could Leopold have tended to nonanthropocentrism beginning with 1923? Whether human beings are the masters of nature, whether they are privileged with respect to other beings, whether they are ends in themselves are the matters have been debated long since. As Leopold points out, most religions assume that "man is the end and purpose of creation, and that not only the dead earth, but all creatures thereon, exist solely for his use" (1923, p. 95). However, the views that humans are privileged creatures which are ends in themselves, and that all the rest on earth are created to serve their demands and purposes are not peculiar to religions only. According to Leopold, what he calls "mechanistic or scientific philosophy," too, does end up with the same prejudice (p. 95).

Nevertheless, and happily, there are also people who reject such a would-be privilege. Leopold cites a few examples:

> This high opinion of his own importance in the universe Jeanette Marks stigmatizes as "the great human impertinence." John Muir, in defense of rattlesnakes, protests: "… as

---

[2] This is what Leopold thinks about moral considerability of nature in 1923. But whether this is a sufficient ground for moral considerability is another question. Could being "an organism possessing a certain kind and degree of life" be a sufficient reason for moral considerability of that organism? It is not hard to find counter evidence. Malign tumors, various viruses, or various animals and plants such as insects and weeds which we think detrimental to human interests are killed "with moral impunity." Are they morally considerable? Or is it morally wrong to kill mosquitoes just to avoid being bitten by them, even if there is no danger of being caught to malaria? Concept of moral considerability is discussed further in section 2.3 below.

> if nothing that does not obviously make for the benefit of man had any right to exist; as if our ways were God's ways" (Quoted in 1923, pp. 95-96).

Leopold calls this "high opinion of [one's] own importance" anthropomorphism. Although he is very well aware that "most of mankind" is proponent of "one of the anthropomorhic religions or the scientific school of thought which is likewise anthropomorphic," he does not seem aligned with these views (p. 96). Rather he humbly states his commonsensical and evolutionary point of view as follows:

> Since most of mankind today profess either one of the anthropomorphic religions of the scientific school of thought which is likewise anthropomorphic, I will not dispute the point. It just occurs to me, however, in answer to the scientists, that God started his show a good many million years before he had any men for audience – a sad waste of both actors and music – and in answer to both, that it is just barely possible that God himself likes to hear birds sing and see flowers grow (p. 96).

As it is known, anthropomorphism and anthropocentrism refer to quite different senses. The former refers to attributing human characteristics to nonhuman entities. The latter, as the name implies, means attributing special or central importance to human beings and their needs and interests with respect to nonhuman members of nature and their needs and interests. However, by anthropomorphism, Leopold presumably means what we mean today by anthropocentrism. Indeed, he does not seem to criticize attribution of human characteristics to nonhuman entities, but he does criticize destruction of nature by humans through the motivation of attributing a special or cosmic value to humankind.

Therefore, for Leopold, expressed as the view of God above, not only human beings but also birds and flowers are important or valuable. Some might still choose to be "anthropomorphic" and boastfully think that the earth was for humans, and that they have a special status on earth, and that they might continue to use natural resources irresponsibly. For those people, Leopold has a few more words to tell:

> And if there be, indeed, a special nobility inherent in the human race – a special cosmic value, distinctive from and superior to all other life – by what token shall it be manifest? … By a society decently respectful of its own and all other life, capable of inhabiting the earth without defiling it? Or by a society like that of John Burrough's potato bug, which exterminated the potato, and thereby exterminated itself? As one or the other shall we be judged in "the derisive silence of eternity" (1923, p. 97).

Hence Leopold invites us to look at what we have done to the earth that we have been living on together with other beings. Most of the members of human species attribute a very high value to

themselves distinctive from nonhuman beings although we share the same land with them. Leopold seems to tell us: "if you are so respectful, so special, so noble, look at what you have done. Have you achieved to establish a respectful society which makes use of the earth wisely, decently? Or are you, like a potato bug, busy with exterminating the place that you live in? Think and answer truly, and decide your value, and compare it with other beings."

Thus, Leopold does not seem to believe in "a special cosmic value," or so called inherent worth in human beings. He states, at least, that there does not seem any sound evidence which show that humans have such value which makes them distinctively superior to nonhuman entities.

However, it is quite possible to look at what Leopold says from a different angle, as well. It is clear that he complains about what he calls anthropomorphism. He seems uneasy with attribution of a special cosmic value to human beings. For this value attribution makes them think that they are the masters of nature and all the rest in nature exists to serve them. But Leopold knows, no doubt, that human beings have capacities which distinguish them from potato bugs. Even though they have mostly lived like potato bugs till this time, they have the potential to establish "a society respectful of [their] own and all other life, capable of inhabiting the earth without defiling it" (1923, p. 97). In my opinion, Leopold, through this analogy between potato bugs and human beings,[3] wants to encourage or provoke us to make a decision about the future of ourselves, in particular, and nature, in general, more than he wants to criticize anthropocentrism. How do we want to be judged in the future: as species members who lived like potato bugs without being aware of the destruction we made to ourselves and the habitat we lived in or the ones who achieved to construct a community in which we lived in harmony with other members?

Indeed, Leopold manifestly declares and acknowledges *objective* evidence of superiority of human beings over nonhuman beings in the *Almanac*. After a species, passenger pigeon, went extinct, some humans arrange a funeral and build a monument to express their grief and to remind present and future generations the significance of the loss. According to Leopold, this dramatic event is a sign of an important step in human evolution. It makes him hopeful about the possibility of establishing a community in which human beings will live in harmony with nature.

---

[3]Leopold likes to use analogies to strengthen his arguments. He uses the same analogy also in "The River of the Mother of God" (cf. 1924c, p. 127).

> For one species to mourn the death of another is a new thing under the sun. The Cro-Magnon who slew the last mammoth thought only of steaks. The sportsman who shot the last pigeon thought only of his prowess. … But we, who have lost our pigeons, mourn the loss. Had the funeral been hours, the pigeons would hardly have mourned us. In this fact, rather than in Mr. Du Pont's nylons or Mr. Vannevar Bush's bombs, lies objective evidence of our superiority over the beasts (1966, pp. 116-117).

Members of *Homo sapiens* have invented many gadgets as well as nylon or bomb in the course of their relatively short history on earth. No doubt all these inventions were "new things under the sun" in the time they were invented by some human being. But, in Leopold's view, what makes us superior over "beasts" is not any of these inventions, unlike many of us might mistakenly suppose. Our superiority over the "beasts" lies, rather, in our capacity of love, sympathy, conscience that we have, not only for ourselves but also for other beings.

We should not think that Leopold debases human rationality with respect to some human sentiments. Not in the least. Rather, he seeks for harmony or reconciliation of feelings with reason as he does the same between humans and nature, between beauty and utility all through his career.

> To love what *was* is a new thing under the sun, unknown to most people and to all pigeons. To see America as history, to conceive of destiny as a becoming, to smell a hickory tree through the still lapse of ages – all these things are possible for us, and to achieve them takes only the free sky, and the will to ply our wings. In these thing [*sic*], and not in Mr. Bush's bombs and Mr. Du Pont's nylons, lies objective evidence of our superiority over the beasts (1966, p. 119, Leopold's emphasis).

Thus, to grasp the evolution of life and our becoming in this process, hence our historical progress, to know and believe in ourselves that we can build our own destiny, and to appreciate the significance of other species for us, are, too, some other characteristics which make us superior over the beasts, hence over the potato bug which exterminates itself while exterminating the potato.

But not many human beings are aware of their genuine superiorities yet: "These things, I say, should have come to us. I fear they have not come to many" (Leopold, 1966, p. 116). That is why land ethic is a new step to be taken before human beings.

We are special beings. However, this is not so because we can produce instruments which make our lives easier or comfortable but which degrade nature little by little. Happily, however, we, at least some of us for the time being, have shown the evidence that we have the wisdom to mourn

for the loss of a nonhuman species, or to conceive evolutionary development of nature and our own species, and to recognize the significance of protecting nature in its wholeness and biodiversity.

What does this show us? Does this show that Leopold changes his views about anthropomorphism or anthropocentrism that he states in Leopold 1923? I do not think that Leopold's acknowledgment of distinctive characteristics of human beings conflict with his views about anthropocentrism that he states in 1923. As we have seen, his criticism of anthropocentrism aims at showing us our inconsiderateness about the tendency of the future of life on earth. He wants to show us with a striking analogy between our way of life and that of potato bugs that we are destroying nature without being aware that we are actually destroying ourselves. In other words, Leopold is against anthropocentrism, if anthropocentrism amounts to destruction of natural resources heedless of the danger which could emerge in the future, like potato bugs' extermination of potato without being aware that they exterminate themselves.

Edward O. Wilson draws attention to another "new thing under the sun," achieved again by humankind, as opposed to the ones posited by Leopold in the *Almanac*. He points out that "[h]uman destructiveness is something new under the sun" (1984, p. 122). According to Wilson, human impact on nature has been so destructive that it is comparable to the smash of giant meteorites which resulted in the extinction of dinosaurs 65 million years ago. This "achievement" of human beings, which is also "new under the sun," is exactly what Leopold criticizes in 1923. Fortunately, human beings have had other characteristics which make them achieve other new things which are constructive rather than destructive. Since we, at least some of us for the time being, are able to conceive nature in its process of becoming, and appreciate the value of nature for us, we are the only beings who have the potential capacity to save nature that was substantially wounded mostly by our species members. This is what makes us superior with respect to beasts and potato bugs, and what makes Leopold hopeful about the future. And that is why conservation is to be achieved "under human dominance" (Leopold, 1942c, p. 199).

Let us look at what we have so far. Leopold rejects the view that human beings have some special cosmic value which is supposed to make them superior with respect to other beings in nature. On the other hand, he does acknowledge that human beings have some distinctive features which make them objectively superior over other beings. This, I argue, is a prima facie

conflict which can be overcome by a closer look at Leopold's views. While rejecting the view that human beings have some special cosmic value, Leopold makes an analogy between potato bugs and human beings. As he points out, potato bugs exterminate themselves while exterminating the potato which feeds them. But they are not aware of this, as deer in a forest without predators which prey on deer, are not aware of exterminating themselves while exterminating trees and bushes. On the other hand, although, we, humans, have the capacity of being aware of outside and ourselves and acting accordingly and decently, most of us do not activate their capacities properly for some or other reason. That is why most of us are not too much different from potato bugs. Even though we have distinctive features, we are not aware of what we are doing to nature without which our welfare is not possible. Those people who argue for human superiority and who think that humans are the masters of nature and that nonhuman world is created for humans are like potato bugs, too. This is the very anthropocentrism that Leopold argues against. What is unbearable for Leopold is presupposing human superiority, although pursuing a life like potato bugs do. Indeed those anthropocentrists who attribute themselves a special cosmic value are not able to show any evidence which prove their superiority in the sense that Leopold conceives "superiority." Although they think themselves arrogantly superior, they live, in fact, not so much differently from the beings which they assume inferior.

Leopold, of course, is aware of the characteristics which distinguish humans from nonhumans. But he believes that having some distinguishing characteristics alone does not make humans morally superior with respect to other beings. Although humans do have many characteristics which distinguish them from other beings, only some of these characteristics might make them superior over the beasts. Happily, not all human beings live like potato bugs. There are some human beings who are aware of the value of nature and its constituents for the welfare of present and future generations. These humans are conservationists. And Leopold believes that they constitute the embryo of the third stage of ethics which he asserts as ecologically necessary and evolutionarily possible (1933b, p. 182; 1966, p. 239). Hence the distinctive characteristics that Leopold ascribes to humans do not pave the way for anthropocentrism, although these characteristics are the "objective evidence of our superiority over the beasts." Leopold acknowledges that humans, i.e., some humans or conservationists, are superior over beasts, but this superiority does not serve as a reason to exploit nature irresponsibly, rather reminds us the scope of our moral responsibility and moral agency. This is very crucial to Leopold's land ethic.

Indeed, unlike strong anthropocentrists, who draw somewhat privileged moral considerability of humans from distinctive characteristics of humans, or from their so called intrinsic value, Leopold draws moral considerability of nonhumans from the moral agency of humans, a characteristic peculiar only to human beings.[4]

But do all these show that Leopold is nonanthropocentrist? That is to say, does he defend that all the constituents of nature, including human beings and deer, for instance, are equally morally considerable? Or if we turn back to the analogy that Leopold makes, are human beings and potato bugs worth equal moral consideration? As we will see in the following subsection, there is sufficient evidence which shows that Leopold does not think so.

2.2.3. Leopold Is Not Nonanthropocentrist

To begin with, the very analogy between potato bugs and humans cited above shows that Leopold does not value a potato bug equally with a human being. For he just wants to remind, or provoke us that human beings are capable of establishing "a society decently respectful of its own and all other life" unlike "a society like that of … potato bug" (1923, p. 97). We, and only we, human beings, have the capacities to establish the former, although we, until present, mostly have satisfied ourselves with the latter. In other words, humans' potential to establish a society which respects whole life might be seen as another evidence of human superiority over the beasts.

We, human beings, have many characteristics which differentiate us from nonhuman beings. But Leopold stresses on just a few of them as "objective evidence of our superiority" (1966, pp. 117 and 119). We should notice that his appreciation of human superiority does not stand for justification of our domination of nature. By drawing attention to a very special characteristic or "nobility," even if displayed only by some minority of human beings yet, Leopold defeats arguments which infer moral considerability from some specialties peculiar to human beings only. He believes that the characteristics which make humans objectively superior to other beings are the ones which make them feel responsible for other beings. Thus, in his view, "objective evidence of our superiority" does make us realize moral considerability of other

[4]As I stated earlier, the concepts of moral considerability and moral agency will be discussed in detail in section 2.3 below.

beings. They should not make us feel arrogant as morally superior beings or should not provide a right to dominate others.

Indeed, why should having some distinctive characteristics give its owner a right to dominate others? Every species on earth might have some characteristics peculiar to that species only. These characteristics are differentia of the species in question. But having some different features which others do not have cannot be a satisfactory ground to justify dominating others. In the animal kingdom, some big predators, such as lions, cheetahs, tigers, sharks etc. use their special powers to hunt other animals. But kingship of lions in the forest makes sense only in anthropomorphic fables that we, human beings, created, being inspired from our own lives. We may try to dominate nature as we have done for centuries. But this is not a moral right given to us. Although biologically we are the members of species belong to animal kingdom, we, at least most of us, like to differentiate ourselves from them and nonhuman nature. As Leopold nicely points out "[i]t may flatter our ego to be called the sons of man, but it would be nearer the truth to call ourselves the brothers of our fields and forests" (1934c, p. 209). Furthermore, as he rightfully questioned earlier we should first of all prove ourselves that we are really distinct and superior to nonhuman beings. "[B]y what token shall [this] be manifest" (1923, p. 97)? We have not achieved, yet, what Leopold expects from a genuinely superior being. If we were really superior beings, we could adequately demonstrate our distinctive capacities which differentiate us from potato bugs, and establish a decent society members of which respect and take care of whole life (p. 97).

Having some distinctive characteristics does not give its owner any right to dominate others. But it might give possibility or opportunity for it. The faculty of reason is one of the most powerful differentia of human beings as many philosophers in the past rightfully pointed out. By means of this faculty human beings have achieved to survive in the midst of perfect wildness, despite their many weaknesses among many physically powerful beings. Through the use of the faculty of reason humans have not achieved mere survival but also established societies which have made them feel more powerful, prosperous, safer beings on earth. As Leopold points out, the cement which has kept these human societies together were ethics and law (1933b, pp. 181-82, and 1966, pp. 237-38). Through this faculty of reason humans have invented many instruments which made their life somewhat easier and safer. As they have developed technology and as they have populated and spread all over the world in the course of history, they have gained self-

confidence and have begun to consider that they could dominate nature in accordance with their needs and interests to become more powerful, more prosperous and safer. They have learned to use the land in accordance with their needs and interests; they have learned to domesticate many animals and plants to serve their needs more comfortably. But power, prosperity, and safety were not some goods to be protected against other beings only. Time has shown them that these goods should also be protected against their fellow species members. As they have learned to hunt and tame animals, as they have learned to dominate nature, they have also learned to kill their species members out of many cunning reasons in bloody wars, and they have learned to dominate each other through various apparatuses invented through reason.

Although having some distinctive characteristics does not give its owner any right to dominate others, it might pave the way for it. Many human beings, and in somewhat anthropomorphic point of view, many nonhuman beings, have "benefited" this opportunity in the course of evolution. Equality and justice are the ideals some courageous human beings are still fighting for in various parts of the world. Nevertheless, there is no equality or justice in wild nature. Nor did they exist in the past human societies; and nor do they exist among present human societies. As some lions are stronger than both their prey and other lions, some human beings are smarter and more powerful than some other human beings. Furthermore, some humans might be born into more powerful, prosperous families, towns, countries, etc., whereas some others have to struggle in much worse circumstances. In the end, we have a wide spectrum of people some of which are much smarter, or stronger, or healthier, or richer than others. Some lucky might have all these wealth besides many others, some however might lack many. Shortage of resources, together with inequality, injustice, egotism and lust for power still lead to terrifying events among human beings. Thus, domination has not aimed against only for nonhuman nature but also against human beings through various apparatuses, such as slavery, massacres, tortures, bloody wars for years.

But human history has not witnessed terrible events only. As I stated above, there have always been some courageous human beings who have demanded and fought for justice through history, many times at the expense of their lives. Thanks to their struggle, we do not have a legitimate institution of slavery today. Although starvation, famine, bloody wars, massacres, tortures and many forms of violence still persist in many parts of the world, most people agree that these are

universally wrong. As freedom develops and deepens with democracy and law, the violence against humans loses support and legitimacy.

The development and deepening in the concept of freedom and morality inevitably affects our treatment of nonhuman realm, also. It might be seen odd, for many people in the world, to confer some rights on animals. But we have had, for a few decades, the universal declaration of animal rights approved by many individuals and organizations, even if it was not accepted by the UN assembly, yet, unlike the declaration of human rights which was accepted after the Second World War ended.

Furthermore some human beings have been arguing, somewhat forcefully after Leopold's postulation of the land ethic, that accepting the rights of humans and animals alone will not solve the problem we face with. They strongly argue that we have to extend the scope of our responsibility to the protection of whole land together with animals, plants, people, waters, soil on it. No doubt there are some motivations which have led them, and happily, increasingly many of us, to this point. These motivations might be moral, economic, and aesthetic. Leopold seems to be motivated by all of these factors. But it should be underlined that he has never lost his special concern for human needs and interests. While arguing for various conservation practices, it is clearly seen that his main motivation is meeting human needs and interests, both for the present and future generations.

Leopold frequently states, not only in his early works, but also in his later works, that his main motivations for conservation are due to human interests and needs rather than intrinsic value and nonanthropocentrism. For instance, in "Planning for Wildlife" he states that there are two reasons for "restoring wildlife." First one is the satisfaction that working for conservation adds to human life. Second is "[w]ild plants and animals … [as] parts of the land-mechanism … cannot safely be dispensed with" (Leopold, 1941c, pp. 193-194). Why does Leopold think that "wild plants and animals cannot *safely* be dispensed with?" We should not overlook the underlined word "safely." To dispense with wild plants and animals is not *safe*. For the sake of whom? To my knowledge, there is no instance where Leopold defends the protection of wild animals and plants for the sake of themselves or for their intrinsic value. However, there are many instances in which he argues for protection of the land for the satisfaction of human good and welfare of both present and future generations. For example, in "The Conservation Ethic,"

many parts of which are largely incorporated in “The Land Ethic,” Leopold approvingly says that the tendency of conservation changes from saving species from extermination to preventing the deterioration of environment. But he needs to stress that while protecting environment from deterioration “quality and quantity of human satisfactions” would be taken into account (1933b, p. 180). In “Conservation Economics” he states that we should work for conservation in order to protect “[t]he permanence of the resources whence comes our bread and butter” and “the opportunity of personal contact with natural beauty” (1934a, p. 193). While trying to reconcile the balance between utility and beauty of the land, he never overlooks the probable use value of some species which seems useless at the moment. Nevertheless, he allows for “eliminating a few species” or radical change in “the distribution of many,” if these are thought to be necessary for human land use (1939a, p. 255). Related with questions about usefulness or harmfulness of species, Leopold cuts the Gordian knot by pointing out that “[t]he only sure conclusion is that the *biota as a whole is useful*” (1939b, p. 267, emphasis added). We may think, with the slender knowledge we have, that some species are useless and we do not need to worry about their protection. But Leopold warns us to be cautious. For we can never be sure whether the species that we think useless for the time being may prove to be useful in the future or not. Having observed the fact that “incredibly minute quantities of certain substances determine the value of soils to plants, of plants to animals,” he anticipates that we may need to “use prairie flowers to reflocculate the wasting soils of the dust bowl[5]” (1939b, p. 271, and 1966, p. 258). And further he notes our concern that we cannot know “for what purpose cranes and condors, otters and grizzlies may some day be *used*” (1939b, p. 271, and 1966, p. 258, emphasis added). Thus we should not let any species go extinct, because some day we may need to use them, even if they seem useless at the moment. In his later works, Leopold employs the concept of land health, interchangeably with stability or integrity of the land. He demarcates ecological right from wrong by the most famous motto of land ethic, stated in the *Almanac*. Something which tends to preserve the integrity, stability and beauty of the land is right. Something which tends to degrade the land is wrong (Leopold, 1966, p. 262). But he also declares that this ecological rightness, i.e., having stable or healthy land, is “essential to human welfare” (1941c, p. 194). Furthermore, he

---

[5] In 1930s, severe dust storms led to great ecological and agricultural damage in huge areas of American and Canadian prairie lands. The main reason behind this damage was thought to be intensive farming methods which have been applied for years and severe drought which followed it. The damage occurred was called Dust Bowl Phenomenon which was also referred in *The Grapes of Wrath* by John Steinbeck (“Dust Bowl,” 2011).

immediately adds that "[t]herefore it is unwise to discard any part of the land-mechanism which can be kept in existence by care and forethought. These parts might later be found to contribute to the stability of land" (p. 194). Thus, his argument simply is the following. Stability or health of the land is essential to human welfare. Therefore we should protect it.[6]

Leopold worked hard to realize conservation objectives that he strongly believed throughout his life. His following words, from one of his latest works, leave no doubt that his main concern was fostering human good, human needs and interests in his struggle for conservation:

> I have an ulterior motive, as everyone has. I am interested in the thing called "conservation." For this I have two reasons: (1) without it, our economy will ultimately fall apart; (2) without it many plants, animals, and places of entrancing interest to me as an explorer will cease to exist. I do not like to think of economic bankruptcy, nor do I see much object in continuing the human enterprise in a habitat stripped of what interests me most (1947a, pp. 336-37).

Among many others cited earlier, we see once more that Leopold tries to justify conservation instrumentally. We have to struggle for conservation objectives because our own welfare, economic, social, aesthetic, and whatever, in short our happiness is closely related with the health or stability of the land.[7]

As I have indicated above, Leopold, on the one hand, suggests protecting any species, prairie flowers, cranes, condors, otters, etc., for we cannot know, at the moment, for what purpose we may need to use them in the future; on the other hand, he admits the fact that we may have to

---

[6] Callicott, or some other nonanthropocentric environmental ethicist, may argue that Leopold does not say that we should protect nature only for this is necessary for human welfare. I agree. Leopold does not say that we should protect nature exclusively for human welfare. But I want to point out that Leopold frequently connects human needs, interests and welfare with the protection of stability or health of nature. Not only this, as we will see in the subsequent section 2.2.3.1, he allows for severe interference of human beings to stabilize the population of nonhuman beings. But he never mentions applying severe measures to control human population, although he is very well aware that humans have far surpassed the carrying capacity in many places in the world. He allows for extermination or radical distribution of nonhuman members of nature for the satisfaction of human needs, but he never talks about such radical measures for human members. That is why, I argue that he, as a man of practical wisdom, is weak anthropocentrist, rather than nonanthropocentrist.

[7] As a sensitive and humane intellectual, Leopold, unsurprisingly, might have been effected by the great historical events of his age. He witnessed two World Wars and 1929 economic depression throughout his life. As it was sensed in his writings, he had deeply felt the outcomes of these three big events both on himself and his family in particular, and on his country and nature, in general. Therefore, it is understandable, as a sensitive man and lover of nature, that he relates conservation with future of his country's economy.

eliminate some species or radically change their distribution in nature for better satisfaction of our own needs (1939a, p. 255). This conception of conservation, which tends to reconcile human development and needs with protecting the health of the land, may also be seen in his treating the concept of carrying capacity, which will be explained in the following subsection.

2.2.3.1. Leopold's Conception of Carrying Capacity for Human and Nonhuman Beings

As I have stated earlier in section 2.2.1 above, Leopold began his career as a forester, and in particular, as a land and game manager. Although he has mitigated his radical views about stringent predator control[8], he has never rejected land or game management in the cases he thought that they were necessary for the health of the land in general, and for the sake of humans in particular. For instance, in his address at the Midwest Wildlife Conference in December 1946, he defended the necessity of culling of deer, and severely criticized intellectuals who argued against this policy. In his opinion, too much deer show pest behavior. Unless their population is controlled from outside, not only wildlife is destroyed, but in the end they have to starve, for they might not find sufficient food. Therefore "[t]he remedy is to reduce females before starvation occurs" (Leopold, 1946a, p. 331).[9] However, not everybody shares his view.

> In 1943, after an educational campaign, the Commission opened the season on antlerless deer. 62,000 were killed, in addition to 66,000 bucks. There had been little advance opposition, but on the day the "slaughter" started, Group 3[10] rose in wrath. It hasn't sat down yet (Leopold, 1946a, p. 332).

Thus Leopold does not only defend killing of some species in a very large extent when he believes that this is necessary for the protection of wildlife, he also severely criticizes people

---

[8] Leopold as a lover of hunting, argued and fighted for elimination of predators in his youth. For he thought that "fewer wolves meant more deer, that no wolves would mean hunters' paradise" (1966, p. 138).

[9] Earlier, i.e., in the days game management was the prime issue or when Leopold was trying to create "hunters' paradise" he was much sharper. For instance, related with the case of species of grouse in Wisconsin he says: "Our total kill could doubtless be increased 160-fold before reaching the biological upper limit" (1931, p. 159). Thus, American hunters could accelerate their killing of grouse in Wisconsin. For, under existing conditions, the related area is abundant in grouse population. In other words, the game policy is arranged totally with respect to human interests.

[10] Leopold classifies human beings in three groups. Group1 is indifferent to conservation problems. Group 2 "thinks with its head, but is silent" to these problems. And Group 3 "does all its thinking with mouth or pen" (Leopold, 1946a, p. 331).

who writes and talks on conservation problems without having no experience or deep and encompassing knowledge of ecology.

In “The Ecological Conscience,” which was written a year after the address cited above, he once more regrets that he was wrong in defending extensive predator control. For predators were performing “any necessary pruning” for the stability of land (Leopold, 1947b, p. 341). In Leopold’s view, when predators were lacking, human beings could do this pruning as much as they could. For “[i]t was evident that if we didn't reduce the [deer] herd, starvation would, and we would eventually lose both the deer and the forest” (p. 341).

It might appear interesting to see that Leopold defends killing of some animals in a work named “The Ecological Conscience.” But, in his view, ecological conscience orders what should be done for the sake of whole land, not for the sake of some individuals of a species. Presumably, only exception is human individuals. Leopold, in “The Ecological Conscience,” once more defends land and game management since he thinks that any of them is necessary, and severely criticizes those “conservationists” who object to the management policies suggested as he did before:

> These people call themselves conservationists, and in one sense they are, for in the past we have pinned that label on anyone who loves wildlife, however blindly. These conservationists, for the sake of maintaining an abnormal and unnatural deer herd for a few more years, are willing to sacrifice the future forest, and also the ultimate welfare of the herd itself (1947b, p. 342).

If we carry Leopold’s words to the present day we can say in confidence that he would not be an animal liberationist. In his view, defending the right of existence of individual animals, without taking into consideration the stability of the whole habitat, is not true conservation. He has a much broader conservation perspective according to which the aim should be preserving the health of the whole land, together with soils, waters, animals and plants collectively, and not only some individuals of the whole. However, it should be pointed out that the reasoning behind Leopold’s thinking is not to sacrifice some individuals for the sake of the whole. But rather he believes that the welfare of individuals could not be possible unless the whole, which involves all individuals, is stable or healthy, at least in the long run. Indeed, he says:

> The basic fallacy in this kind of “conservation” is that it seeks to conserve one resource by destroying another. These “conservationists” are unable to see the land as a whole. They are unable to think in terms of community rather than group welfare, and in terms

> of the long as well as the short view. They are conserving what is important to them in the immediate future, and they are angry when told that this conflicts with *what is important to the state as a whole in the long run*. (1947b, p. 342, emphasis added).

In the deer case, for instance, if the deer population is not controlled, they would continue to multiply for a while, and destroy the habitat to which their and many other beings' survival depends. But after they devastated the habitat they would, too, begin to starve, and die. Thus Leopold believes that by controlling population of some individuals at the outset we do not harm these individuals more than we do in the long run. Rather by bringing down their number to the estimated "carrying capacity"[11] of the habitat they live in, we save both the welfare of these individuals and the whole habitat, in the long run.[12]

But there are some problems in this reasoning. First, does seeing that the land would be harmed unless population of species was kept around its carrying capacity give human beings the "right of killing" some individuals of that species? As we have seen, Leopold responds this question with a strong "yes." In his view, true conservation takes into account community welfare rather than group welfare. However, this brings another question in mind. Leopold does know that human beings, too, far exceed their carrying capacity in many places (cf. 1939b, p. 270; 1941a, p. 284; 1946b, pp. 225-26; 1966, p. 257). Then, would Leopold approve the controlling of human population by culling, as he did it for deer or other nonhuman species? Not surprisingly, he does not. As we have seen above, he allows for modification or management of nonhuman parts of the land, to the extent that some species might be *eliminated* or many others might be radically *redistributed* in nature, in accordance with human interests (1939a, p. 255). Or as he

---

[11] Carrying capacity of organisms in an ecosystem is limited mainly by the resources available, and of course by the distribution of these resources among the organisms live in the ecosystem (Callenbach, 2008, pp. 23-25). According to Leopold, carrying capacity of a species in a certain habitat or ecosystem is its characteristic number (1941a, p. 282). Indeed, it shows the population limit for an organism in an ecosystem. Thus if the population of some species surpasses the carrying capacity of the land without a plausible reason, this might be a sign of destabilization of the land (Leopold, 1942c, p. 205).

[12]As we will see in section 2.7, holistic conception of land ethic has its criticisms for it implies a form of fascism called ecofascism. It is argued that a consistent land ethic which defends protection of whole land should allow for deliberate reduction of human population as it freely does for that of nonhuman individuals when this is thought to be necessary. However, Leopold does not suggest such severe measures for human population control but just offers considering a "moratorium on human increase" (1941a, p. 284). Thus, although Leopold's conception of land ethic may not be blamed as ecofascistic, it seems to provide some room for speciesism or anthropocentrism on behalf of the needs and interests of human members of the land.

states, “we had to amputate many marshes, ponds and woods to make the land habitable” (p. 259). However, none of these severe operations are considered to be practiced upon human species. For instance, Leopold never talks about culling of some human beings who are, too, part of nature, or biotic citizens, like innumerable plants and animals, even if they have far exceeded the carrying capacity of the habitat in which they live. Rather, he prefers a much softer and reconciliatory tone, and just posits some suggestions while talking about the control of human population:

> [T]ools have actually raised carrying capacity, and ethics have at times suspended predation, but perhaps this is possible only within certain limits of population density. Perhaps the present world-revolution is the sign that we have exceeded that limit, or that we have approached it too rapidly. If so, instead of calling a moratorium on science, … why not call a moratorium on human increase? Why not seek quality in place of ciphers in human populations? Why not bend science more toward new understandings, less toward new machines? (1941a, p. 284).

Although he suggests culling of nonhuman beings when he thinks that this is necessary for the good of the biota in question, for human beings he suggests much more moderate alternatives: increasing the quality of life rather than the quantity of people.

Indeed, this is very understandable in a period where scientific and technological developments were passionately welcomed and where concern for nature conservation was relatively new. However, this does not change the fact that Leopold does not take human needs and interests on a par with nonhuman ones. Leopold clearly sees that a conservation approach which does not pay due care for human needs and interests may not be actualized in practice. Therefore he suggests a reconciliatory middle route to overcome conservation problems. In the present jargon of environmental ethics, his suggestion of conservation as harmony between human beings and the land comports well with weak anthropocentrism rather than with nonanthropocentrism.

2.2.3.2. Leopold’s Concern for Future Generations

Leopold’s special concern for humanity with respect to nonhuman constituents of the land may also be seen in his emphasis on our duty to future generations. Since the beginning of his career as a forester, Leopold frequently underlines our responsibility for future generations. As I indicated earlier in section 2.2.1, Leopold, being inspired from the words of Ezekiel, points out “that the privilege of possessing the earth entails the possibility of passing it on, the better for

our use, not only to immediate posterity, but to the Unknown Future, the nature of which is not given us to know" (1923, p. 94).[13]

Although he allows for elimination of some species when he thinks that this is necessary for the better satisfaction of human needs and interests, he says in 1918 that "[t]he perpetuation of interesting species is good business, and their extermination, in the mind of conservationists, would be a sin against future generations" (1918b, p. 59). Notice that extermination of "interesting" species is a sin, but not against to the species in question, rather against future generations, i.e., for some future human individuals would be deprived of some kind of satisfaction, aesthetic or otherwise.

While arguing for the protection of the last remnants of wilderness in America, Leopold underlines his concern for posterity as follows:

> I am pointing out that in this headlong stampede for speed and ciphers we are crushing the last remnants of something that ought to be preserved for the spiritual and physical welfare of future Americans, even at the cost of acquiring a few less millions of wealth or population in the long run. Something that has helped build the race for such innumerable centuries that we may logically suppose it will help preserve it in the centuries to come.
>
> Failing this, it seems to me we fail in the ultimate test of our vaunted superiority – the self-control of environment. We fall back into the biological category of the potato bug which exterminated the potato, and thereby exterminated itself (1924c, p. 127).

In the first paragraph Leopold cries out for the preservation of wilderness. Why should we preserve wilderness? To save the spiritual and physical welfare of future generations. Leopold urges us to do this even at the expense of losing some money or of having a decrease in population. Why should we preserve nature at the expense of millions of wealth? Because,

---

[13] I would like to point out that Leopold, here, anticipates some of the debates about the problem of future generations which have been carried out after him. Some argue that our responsibility to future generations is quite dubious (cf. Bandman 1982; Hanser 1990; Kavka 1982; Parfit 1982; Nolt 2011). It is argued that since we cannot know the nature, tastes, demands, needs, identity, etc., of posterity, we do not have any responsibility or duty to leave future generations a world which fits to our standards, nature, needs, etc. Although Leopold does not provide an argument, he asserts that our "privilege of possessing the earth entails the possibility of passing it on … to the *Unknown Future*, *the nature of which is not given us to know*" (1923, p. 94, emphasis added). Thus we should not try to escape from our responsibilities for the posterity by somewhat eccentric arguments. Even if we cannot know the nature of the future and future generations, we are responsible to pass a livable earth, at least as much as in our own standards of quality of life and welfare.

nature as it is, alive and undamaged, "has helped build the [human] race for such innumerable centuries" (p. 127). Nature has proven itself by doing its role for innumerable centuries. If we want nature to continue its course, or if we want humankind exist for more centuries, spiritually and physically satisfied, we should protect it alive and undamaged. We should notice that all the justifications Leopold provides to preserve nature are instrumental to some human good. We are required to preserve nature *for* the spiritual and physical welfare of future Americans or *for* the continuance of humankind.[14]

In the *Almanac*, too, Leopold argues that we should protect remnants of wilderness for future generations:

> To the laborer in the sweat of his labor, the raw stuff on his anvil is an adversary to be conquered. So was wilderness an adversary to the pioneer.
>
> But to the laborer in repose, able for the moment to cast a philosophical eye on his world, that same raw stuff is something to be loved and cherished, because it gives definition and meaning to his life. This is a plea for the preservation of some tag-ends of wilderness, as museum pieces, for the edification of those who may one day wish to see, feel, or study the origins of their cultural inheritance (1966, pp. 264-65).

By "the laborer in repose [who is] able … to cast a philosophical eye on his world," Leopold presumably meant himself in particular, and other conservationists, and perhaps other educated minds or intellectuals, who do not have to fight to survive, or to obtain means of subsistence only, unlike "the laborer in the sweat of his labor." Thus conservationists, and hopefully other educated minds, should take the initiative in protecting, at least some examples, of wilderness for the future generations among whom there might be some who would like to "see, feel, or study the origins of their cultural inheritance," as Leopold himself does.

While arguing for the necessity of protecting an endangered species, "the grizzly," and last remnants of wilderness, Leopold once more reminds us of our duty to future generations:

[14] One of the instruments that Leopold often benefits, to motivate us to preserve nature, is analogy. He once more refers to "potato bug" analogy, according to which human beings are likened to potato bugs which unknowingly exterminate potato and thereby exterminate itself. We have seen earlier, in section 2.2.2, that Leopold questioned human superiority by referring to the same analogy. Had human beings been really superior, as mostly they supposed so, they should have proven this, e.g., by establishing "a society decently respectful of its own and all other life, capable of inhabiting the earth without defiling it" rather than a society destroying both itself and the earth (Leopold, 1923, p. 97). Leopold refers to the same provoking analogy again, and this time tells us that if we think that we are really different than a bug, we should prove this by preserving nature which has nurtured us and other beings for innumerable years.

> Permanent grizzly ranges and permanent wilderness areas are of course two names for one problem. Enthusiasm about either requires a long view of conservation, and a historical perspective. Only those able to see the pageant of evolution can be expected to value its theater, the wilderness, or its outstanding achievement, the grizzly. But if education really educates, there will, in time, be more and more citizens who understand that relics of the old West add meaning to the new. Youth yet unborn will pole up the Missouri with Lewis and Clark, or climb the Sierras with James Capen Adams, and each generation in turn will ask: Where is the big white bear? It will be a sorry answer to say he went under while conservationists weren't looking (1966, p. 278).

Thus the value of land in general and endangered species and wilderness areas in particular can be understood in a broader perspective, or in "a long view of conservation." As more human beings get the knowledge of ecology within the perspective of evolution, through education, we may be more hopeful about the recognition of the value of the land and of its constituents. Only those people who have this broader evolutionary perspective can appreciate the value of both old and new, and how the new owes to the old. If we do not want to be blamed by our future descendants, we should not escape our responsibility to leave a land which is no less diverse than we have to the future.

Finally, Leopold's following sentimental words softly, beautifully shows us that our duty to our children are not limited with growing them healthy, educated and competent. Good health, education and competence could only have meaning together with a diverse and healthy nature to be experienced and enjoyed.

> To conclude: I have congenital hunting fever and three sons. As little tots, they spent their time playing with my decoys and scouring vacant lots with wooden guns. I hope to leave them good health, and education, and possibly even a competence. But what are they going to do with these things if there be no more deer in the hills, and no more quail in the coverts? (1966, p. 233).

Leopold is not anthropocentrist. As we have seen, he argues against views that defend humans' unconditional right for domination of nature. Nevertheless, I hope that what I have provided in this section suffices to show that Leopold is not nonanthropocentrist, either. As I will argue in section 2.7, it would be proper to qualify him as weak anthropocentrist. For, although he states that human beings should realize that they are biotic citizens as plants and animals, soils, waters, marshes, and all other organic and inorganic constituents of land, he does not take needs and interests of human beings on a par with those of nonhuman beings. Although, in his view, nonhuman beings, too, are morally considerable, they are not equally morally considerable with human beings. He defines conservation as harmony between man and land, and as a practice

which should be carried out under human dominance. He argues for the beauty of the land as well as its utility, and the beauty and utility he mentions primarily serve to satisfy human needs and interests. He argues for protection of the aesthetic and recreational value of nature, and also he acknowledges that nature is a resource or an instrument for self-expression for man. He defends policies to decrease the population of nonhuman species to their carrying capacity through quite severe means, but he just offers considering “moratorium for human increase” (1941a, p. 284). He argues for the needs and interests of future generations in order to motivate present generations to protect nature. He allows for modifications made on nature by human beings, including radical displacement and elimination of some nonhuman species for the better satisfaction of human needs and interests. Finally, while trying to reconcile beauty and utility, or harmonizing human needs and interests with that of the land, Leopold should have been aware of the fact that some of his suggestions cited above might harm the integrity, stability and beauty of nature.

2.3. Moral Agency and Moral Considerability

In the previous section we have seen that Leopold asserts some characteristics peculiar to human beings as the evidence of superiority over beasts. But he is so careful in that these characteristics are the ones which promote us to acknowledge the moral considerability of nonhuman part of nature, and not the ones which help us to dominate nature. In this section, I will try to distinguish the concept of moral considerability from that of moral agency.

2.3.1. Moral Considerability and Moral Agency of Human Beings

Acknowledging distinctive characteristics of human beings has not much to do with the distinction between anthropocentrism and nonanthropocentrism. One may acknowledge distinctive features of some other being, e.g. of cheetahs. But acknowledging the fact that cheetahs are the fastest animals on earth does not make one a cheetahist. Similarly one may acknowledge distinguishing characteristics of human beings. But this does not show that s/he is an anthropocentrist. Furthermore, a nonanthropocentrist does not fall into contradiction, if s/he acknowledges distinctive features of human beings. One may recognize differentia of various species including human beings, and may value all species equally.

By underlining the significance of humans' mourning for the loss of a nonhuman species, Leopold, in fact, emphasizes moral agency of humans, and their potential or capacity to enlarge their sympathy and responsibility towards others. Indeed, we are not only moral agents but also we are the only species who judges moral considerability of beings which are not moral agents.

Presumably, most of the human beings of twenty first century, who have sufficient mental capacities to appreciate the value of morality, would not deny the moral considerability of all human beings in principle. We mostly believe, at least in theory, that all human beings should be treated with equal respect. As Kant says, all human beings should be treated as ends in themselves and never as a means only. As it is known, for Kant, all human beings are ends in themselves and human society is a kingdom of ends.

Nevertheless, whether all human beings have always been treated in equal respect in practice is another question. Human history witnessed the days many human beings were treated extremely cruelly by their own species members. Were all human beings killed in tainted wars, massacres, tortures valued as ends in themselves by their fellow species members who somehow participated in their killing or suffering? Can we say that human beings who were suffering from diseases, such as leprosy, plague, or various mental disorders were treated in accordance with Kant's categorical imperative in the past? Was not slavery a legal institution less than two centuries ago (and in many countries even in the twentieth century)? Even one of the greatest ethicists of all times, Aristotle, stated that slaves, like animals, could be treated as properties (1995, Book I, § iv, 1253ᵇ 32; Book I, § viii, 1256ᵇ 15-26). In other words, in Aristotle's eyes, slaves were not morally considerable, at least as much as "free" citizens were. But they were, too, our species members, and had, no doubt, intelligence, conscience, consciousness, and many other virtues that every "normal" human being had. For instance, Epictetus, another great philosopher, was born slave and remained slave through his youth. Moreover, in Aristotle's view, women, "free" women, would not be treated as slaves, but they would be subordinate to men (1995, Book I, § v, 1254ᵇ 13-14).[15] Are not discrimination between male and female, between races, between castes, or between economic classes, still a problem to be solved in today's modern, or post-modern, world? In practice, even today, some human beings are more

[15] But Aristotle also says the following: "man is the best of all animals when he has reached his full development, so he is worst of all when divorced from law and justice" (1995, Book I, § ii, 1253ᵃ 31-33).

morally considerable than some others. But theoretically, and in many books of morality, it is supposed that all human beings are morally equal. This theoretical presupposition is not disturbing to most of us today, unlike it was unbearable to many people in the days slavery and various other discriminations were much more deeply felt and prevalent than today and accepted as “normal.” In other words, this theoretical presupposition that is acknowledged by most of us, even if it is not realized in practice fully, shows the level of progress that morality has taken in the course of its evolutionary history. Perhaps the Universal Declaration of Human Rights adopted by the United Nations General Assembly, after more than seventy million human beings were killed in the Second World War, might be seen as a symbolic climax of this moral progress at the time it was adopted.

Why do we believe that we, humans, are morally considerable more than anything else? Due to our various distinctive qualities, such as rationality, consciousness, self-consciousness, conscience? The first article of the Universal Declaration of Human Rights reads: “All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood” (“Human Rights,” n.d., article 1). Does our being endowed with reason and conscience make us more valuable or more morally considerable than other beings? But there are some humans who lack some or all of the qualities attributed to humankind in general. Do we think that they are not morally considerable? Can we deny our responsibility for babies, children, or people who suffer from various mental or cognitive disorders? Can we say that we can attribute moral considerability to all humankind since all “normal” people have these faculties? Or can we say that humans, e.g., who have higher IQs or EQs, are more morally considerable than who have less? Probably we would not respond affirmatively to any question cited above. So, having some qualities that distinguish us from other beings does not seem to be a sound reason for moral considerability.

After the Universal Declaration of Human Rights was adopted, United Nations adopted many new conventions related with humans, such as Rights of Children, Rights of Disabled People, and Rights of Indigenous People, etc. All these conventions aim at eradication or reduction of cruelty and discrimination between human beings. There has been a text of Universal Declaration of Animal Rights, signed by many human organizations and individuals, for several decades. The text has articles which remind of Universal Declaration of Human Rights, but it has not been adopted by United Nations General Assembly yet. It seems bizarre for many people

to recognize the rights of animals, and accept responsibility for them, while there are millions of members of human species suffering from various diseases, poverty and famine, even if increasing number of people sincerely struggle for animal rights.

Interestingly enough, although there is no convention specifically on animal rights adopted by United Nations, environmental problems such as climate change, conservation of biodiversity and water resources, and sustainability have been in close concern of United Nations for quite a long time. For instance, vast majority of nations, 193 to date, have become Parties to the Convention on Biological Diversity. The convention, by and large, has quite a holistic perspective.

Nevertheless, it was pointed out in the web site of the United Nations that "[e]cosystems, species and genetic resources should be used for the benefit of humans, but in a way that does not lead to the decline of biodiversity" ("Biological Diversity," n.d.). Even if the convention has a much larger perspective than a text on animal rights or human rights, what is aimed primarily is protecting "the benefit of humans." Although we are expected to be aware of the fact that "biological diversity is being significantly reduced by certain human activities," it is underscored that "conservation and sustainable use of biological diversity is of critical importance for meeting the food, health and other needs of the growing world population" ("Convention on Biological Diversity," 1992, pp. 1-2). Thus on the one hand, it is confessed that we, members of *Homo sapiens*, significantly reduced biological diversity, on the other hand, however, it is said that we will conserve and sustainably use biological diversity (i.e. natural resources) in order to satisfy various "needs of the growing world population [of humans]." Furthermore, on the one hand, it is said that "the Contracting Parties [are] [c]onscious of the intrinsic value of biological diversity and of the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components," on the other hand they are "[d]etermined to conserve and sustainably use biological diversity for the benefit of present and future generations" (pp. 1-2).

In fact, the United Nations' "Convention on Biological Diversity" fairly represents the average responsible, conscious and conscientious human mood on the issue of biological diversity in particular, and environmental problems in general. That is to say, even most of us who believe the necessity of conservation argue that we should protect nature with its rich biodiversity,

because this is necessary for the interests of our own species, both for present and future generations.

We seem to attribute moral considerability to ourselves so to speak by common consent, like we have eventually and mutually agreed on the Universal Declaration of Human Rights. Needless to say, I do not want to say that development of morality, or law, or adoption of Human Rights occurred out of blue. The present conception of morality and law that has been reached, together with the progress of freedom and democracy all over the world, and the culmination of our conception of universal rights, law and human ethics, even if symbolically in the Universal Declaration of Human Rights, are the result of thousands of years of human experience in particular, including bloody wars, massacres, and other crimes, and whole process of evolution in general. We are not able to know what exactly the crucial steps taken in the progress of morality were, especially during the days *Homo sapiens* newly emerged. But presumably persistence and progress of human civilizations would hardly be possible if we could not come up with and develop ethics and law in the course of human evolution.

Thanks to development of ethics and law, today many of us have come to the level of understanding that we can no more rely on arguments defending that only human beings are morally considerable for only they are moral agents. As I stated in the first chapter, according to Fingarette, value of a moral agent is closely related with his/her accepting responsibility. As a moral agent enlarges his/her scope of moral responsibility, and as much as s/he fulfils his/her duties to beings for whom or which s/he accepted responsibility, s/he becomes more moral and valuable. In this sense, moral agents are not beings who have the same qualities, or the same moral values. Value or moral quality of moral agent depends on the scope of moral responsibility s/he accepted and his/her success in fulfilling his/her responsibility. It is something tested under the force of practical life and gained through experience. No doubt there is a difference in accepting responsibility for something and fulfilling that responsibility. Furthermore, even accepting responsibility for something depends on the circumstances, time, culture, capacity, social and biological circumstances, etc., which are mostly given to or could not be changed much by a moral agent. For instance, when slavery was a legal institution two hundred years ago in the United States, one would not be blamed by majority of people, if s/he denied moral responsibility for black human beings who suffered from cruelty of their owner and other white people. Rather it was “normal” to insult blacks and own them as slaves. When a

white respected blacks and acted accordingly, this was not something approved by the majority of people. The norm was to insult blacks. Respecting them was a behavior against the norm. The case of Jewish people in the time of Nazis is another example. Jewish people were respected as every human being in Germany before the reign of Nazis. They were moral agents and worthy of moral considerability according to existing norms of society. But as the reign of Nazis has pervaded, behaviors of average Germans have changed toward Jewish citizens. Jewish people were no more seen as ends in themselves, but turned into means. No doubt, there were Germans who did not change their acts toward Jewish people, but it was a fact that many Germans shrank their scope of responsibility and excluded Jewish people from their scope of responsibility after Nazis became sovereign in Germany. After having lost hundreds of millions of individuals in diverse cruel acts which resulted in deep scars in the tissue of human community, we realized that slavery and racism were universal moral wrongs. Today most of us, but unfortunately still not all of us, seem to agree that respecting every human being, irrespective of their race, religion, sex, etc., is the moral norm.

The case of animals and other nonhuman constituents of the land might be considered in a similar vein. Some of us strongly believe that they deserve moral consideration. Number of people who think that animals are morally considerable dramatically changed as compared to, say, 50 years ago. I remember, during my childhood in my home town, that street dogs were poisoned, or even shot by the officers of the municipality in the streets. I do not remember anyone who was complaining about this cruelty. Children were watching dying of dogs on the streets without any trace of fear. This was the “norm” then. I have heard lately that present municipality decided to establish a dog house, although there are still some people who strongly defend extermination of street dogs, even by the methods that I cited above. What I am trying to say is the following. In my opinion, rules and norms of morality is not immutable, they are changing, developing and improving, even though we are more or less agree on some universal rules of morals at present. It is a fact that we were not bound with all the same rules of morality, which were the norms 200 years ago, or 2000 years ago. Presumably we are morally in a better condition than the times in which cannibalism, slavery, racism or other human cruelties prevalently existed. Furthermore, unless the rules of morality are accepted and obeyed by the majority of people in the society they are applied, they are impotent. There should be tacit or explicit consent. There should be mutual agreement. On the other hand, morality and the scope and depth of moral responsibility do not evolve and develop only spontaneously. Moral agents

have a significant role in this process. And some moral agents who continuously enlarge their scope of moral responsibility and try to fulfill their responsibility, despite the existing norms of the society they live in, are the main protagonists of the development of morality toward good.

2.3.2. Moral Considerability of Nonhuman Beings by Human Moral Agents

Distinguishing moral agency from moral considerability might be helpful to understand whether nonhuman part of nature could be morally considerable or not. As I argued above being a moral agent is not the necessary condition of being morally considerable, though the former might be the sufficient condition for the latter.[16] That is to say, a human being in particular, or any other being in general, might deserve moral consideration, although that being is not a moral agent.

To my knowledge, only human beings can be moral agents. For only human beings are capable of moral responsibility and fulfilling the duties that accrue from the responsibility they accepted.[17] Nevertheless, not all human beings are moral agents. Humans who lack some capacities, such as reason, consciousness, conscience, might not be moral agents. Needless to say, extent and power of these capacities is not constant in every human individual, rather it changes with respect to person and time. For instance, mentally retarded or handicapped people, or people who lost consciousness due to some reason, or babies and most children are not usually held morally responsible for most of their actions. And they are not assumed as full-fledged moral agents because they do not have the capacities to accept and fulfill their responsibilities. We do not usually blame or think of punishing them when they commit a moral wrong. Furthermore, it is possible to say that some humans are actually and some are potentially moral agents. “Normal” people who are sufficiently capable to accept and fulfill their

[16] Nevertheless, as I indicated above, human history witnessed cases in which moral considerability of some human beings were suspended. Even many human beings who were mentally capable of being moral agent were not regarded as morally considerable beings in the past. When slavery, racism, or various other discriminations such as between male and female, castes, economic classes, etc., were the norm, it would not be possible talking about equal moral considerability even among human beings. Even at present, discrimination among human beings is still a problem which needs to be overcome. However, at least principally or theoretically, we mostly agree on equal moral considerability of all human beings irrespective of their satisying conditions of moral agency.

[17] It is possible to observe realization of some altruistic instincts among some “social” animals, especially towards their own offspring and kind. But it is hardly possible to see them as having and applying the concept of responsibility and morality in the sense that we observe in human communities. At least, no animal kind but humankind, seems to have and apply an articulate concept of moral responsibility and organized system of morality.

responsibilities are actually moral agents, but babies and children, or people whose mental capacities are harmed but might be healed by proper care are potentially moral agents. However it should be pointed out that within the framework of existing human ethics, which has got more or less approval in the present modern world, all human beings, irrespective of their disability, race, religion, sex, economic class, etc., are regarded as equally morally considerable, even if they do not satisfy the conditions of being a moral agent.[18]

What about nonhuman part of nature? Are nonhuman members of nature worthy of moral consideration, too? Presumably, before the emergence of environmental philosophy, most of us did not consider, at least as much as we do today, whether nonhuman members could also be morally considerable or not. No doubt, as Leopold points out, some human beings had warned in the past that harming nonhuman beings was wrong (1923, p. 94; 1933b, p. 182; 1966, p. 239). But human beings, by and large, have believed, perhaps due to influence of some religious and "scientific" sayings, as Leopold says (1923, p. 95), that nonhuman world exists for the interests of humans, and that humans could use it whatever way they like. Thus we have usually exploited nonhuman nature irresponsibly and relentlessly. We have not noticed the significance and value of them until we have recognized that they were lessening, or even some were going extinct due to our inconsiderate acts. We have not realized their importance for our own life, their contribution to our survival, welfare, and happiness. For a few decades, however, and especially with the warnings of environmental scientists and philosophers, we have begun to understand that nature is not an unlimited resource which never ends. Even if we still continue to populate and invade every piece of nature, and exploit it in every way we like, we have increasingly begun to understand detrimental influence of our reckless and relentless acts on earth. Human awareness about the significance of nonhuman nature has begun to increase together with recognizing the fact that natural resources are not illimitable and inexhaustible. Leopold observes this situation related with wilderness question in his "Wilderness as a Form of Land

[18] This implicit assumption and limits of this framework are not free of problems at all. For we accept, by this assumption, for instance, that villains, dictators, torturers, serial murderers are morally considerable. On the other hand, present state of ethics has not been reached easily. As I discussed above, we have attained that state after our ancestors have experienced many forms of discrimination, cruelty, such as cannibalism, slavery, racism, exploitation, fascism, dictatorships, massacres, etc., for thousands of years. Although we have not attained an ideally just, happy community, yet, fortunately slavery is no more a legal or legitimate institution; torture is crime in most of the countries; racism, fascism, dictatorships are blamed by most of us.

Use." Why do most people favor industrial development over protection of wilderness? Why does protection of wilderness not seem as significant as industrial development to most of human beings? Because first, the wilderness preservation is a relatively new question. As Leopold says, "in America the point of elimination has only recently appeared upon the horizon of foreseeable events" (1925c, p. 134). Second, the wilderness preservation has not been an issue in our consciousness, yet. "During our four centuries of wilderness-conquest the possibility of disappearance has been too remote to register in the national consciousness. Hence we have no mental language in which to discuss the matter" (pp. 134-135).

These two remarks that Leopold makes are indeed very substantial diagnoses about wilderness preservation in particular, and conservation problem in general, and they have significant psychological and philosophical extensions. Most of us are still unaware of what we might lose. This is similar to being unaware of the significance and the value of a close friend. As long as s/he is alive and closer to us, there seems no problem. We can enjoy, at times egotistically, the fruits of his/her friendship, as if it would never be interrupted, or worse, as if it would never end. Most of us realize the value of a particular friendship only when we understand that we might lose it; for instance, when that friend goes away, or when s/he had a hard illness. Even worse, we might realize his/her value only after we have totally lost her/him. The similar case is also true about our relationship with nature. Up until this time we have enjoyed the innumerable fruits of nature. But a little bit different than human-human relationships, our relationship with nature has mostly been one sided. We have mostly taken from nature, without giving much in return. We have unconsciously thought that the resources of nature were illimitable and inexhaustible. But some of us have bitterly begun to understand that this is not true. We have begun to recognize that nature, due mostly to our deeds, could be ill. We have only recently begun to realize that nature, upon which our existence wholly depends, might be so harmed that it could no more satisfy our insatiable needs if we do not take necessary measures as soon as possible. We have begun to realize that human beings are part of nature, and not its masters. In short, we have begun to understand in torment that serious harm of nature would result in the loss of not only some nonhuman parts but also our own species as well. Unless this understanding prevails through the consciousness and the conscience of most of our species members, natural life in general and human species in particular would be under substantial risk. Nevertheless, we should also be aware that "to register [this understanding] in the national consciousness" or in personal

consciousness and conscience is not an easy job. It needs time. And in particular, it needs time, patience, and effort of nature lovers, scientists, and philosophers (Leopold, 1925c, p. 135).

So, according to Leopold, is nonhuman nature *morally* considerable? As we have seen above, Leopold believes that nonhuman nature in general and wilderness in particular deserves serious consideration. But it is not certain whether this consideration is moral.[19] Leopold also points out that "wilderness is a resource" (1925c, p. 135). First, it is a resource which provides various raw materials, or it is a resource to be exploited through industrial purposes. As Leopold rightfully observes, "[f]rom the earliest times one of the principal criteria of civilization has been the ability to conquer the wilderness and to convert it to economic use. To deny the validity of this criterion would be to deny history (p. 134). Second, it is a resource, "in the sense of a distinctive environment which may … yield certain social values" (p. 135). Note that both senses Leopold suggests are instrumental justifications to protect wilderness. That is to say, wilderness is a resource to be exploited to satisfy either industrial or social needs of human beings.[20] So Leopold does consider wilderness; but to satisfy interests of human beings. Is this a form of moral consideration? Maybe it is. We can argue on behalf of Leopold that since human beings are morally considerable, acting in such a way to protect the means which contribute to the welfare of human beings are morally considerable as well. But surely this is not all Leopold would say about the moral considerability of nonhuman realm. In order to support conservation objectives, Leopold does not hesitate referring to scientific, philosophical, and religious figures. One of these figures is prophet Ezekiel that I mentioned earlier. Leopold quotes following words from Ezekiel:

> *Seemeth it a small thing unto you to have fed upon good pasture, but ye must tread down with your feet the residue of your pasture? And to have drunk of the clear waters, but ye must foul the residue with your feet.* (Quoted in Leopold, 1923, p. 94, italicized in the original)

---

[19] As I indicated in section 2.2.1, Leopold referred to animism of Ouspensky to show that we cannot destroy nonhuman part of nature with moral impunity (1923, p. 95). For "earth is an organism possessing a certain kind and degree of life" (p. 95). But as I argued in the same section, this does not seem a sound ground. For we do (and perhaps we should) destroy many nonhuman beings, such as malign tumors, viruses, various insects and weeds with "moral impunity."

[20] For Leopold's somewhat detailed analysis of wilderness in a specific area in the Southwest as various forms of resource for the benefit of human beings cf. Leopold, 1923, p. 86. In a much later work, Leopold defines ecology as "the attempt to understand what makes resources stable or unstable" (1941a, p. 282).

According to Leopold, above words of Ezekiel involve “an epitome of the moral question” (p. 94). He draws from these words a moral conception that persists also in the *Almanac*. In Leopold’s view, Ezekiel's words mean “that the privilege of possessing the earth entails the possibility of passing it on, the better for our use, not only to immediate posterity, but to the Unknown Future, the nature of which is not given us to know. It is possible that Ezekiel respected the soil, not only as a craftsman respects his material, but as a moral being respects a living thing” (p. 94). In this sense, then, utilizing the resources of nature is a privilege given to us. And this privilege brings some responsibility on our shoulders, namely, to pass these resources to the posterity. Furthermore, nature deserves to be respected not only in the way “as a craftsman respects his material,” but also in the way “as a moral being respects a living thing.” So, if we are moral beings or moral agents, we have the responsibility to treat nature, not as a simple material, or resource, to be exploited, but as “a living thing,” to be respected. Thus we see the seeds of Leopold’s mature thoughts here. Indeed, respecting “the soil … as a moral being respects a living thing” is a significant and novel view which repeats also in the *Almanac* (cf. Leopold, 1966, pp. xviii-xix, and p. 240). Consequently, in Leopold’s view, nonhuman nature is morally considerable at least for two reasons. First, we, as moral agents, have the duty of passing nature in its wholeness to future generations. Secondly, as being parts of nature, nonhuman constituents deserve respect as much as we do. Furthermore, we see once more that Leopold emphasizes moral agency of human beings, as he does in the *Almanac* by emphasizing, for instance, humans’ mourning for a nonhuman species. Thus we, as “moral beings,” or moral agents, should respect nonhuman beings as we respect our fellow species members. This is something which makes us objectively superior with respect to the beasts for which respect for other species is not an issue.

To summarize, the view that only human beings are morally considerable is mistaken. Only some human beings are moral agents. Babies, little children, or mentally retarded or handicapped people are members of human community but they are not moral agents. We do not blame or punish them, or we do not keep them responsible from their acts when they commit a moral wrong. But even if they are not moral agents, all human beings are equally morally considerable. There seems a consensus on this, at least in principle. In a similar vein, we can agree on moral considerability of nonhuman entities, even if they are not moral agents. Furthermore, as a member of human community I may value myself and my fellow species members more than I do other constituents of nature. But as a thinking being I may acknowledge that some other

being is more valuable than an average human being for the health of the land. This is a feature peculiar to human beings. As Leopold says, our superiority over beasts lies in this kind of peculiarities, such as mourning for a nonhuman species, acknowledging the value of nonhuman species for us and for the health of the land, having a potential to establish a society in which all members, humans and nonhumans alike, morally respected, etc.

2.4. Land Ethic as a New Moral Contract

It was pointed out in section 2.3.1 that there does not seem much relation between acknowledging the distinguishing characteristics of humans and advocating anthropocentrism or nonanthropocentrism. It is quite possible that one may observe essential differences of humankind as a species being and legitimately endorse either anthropocentric or nonanthropocentric world view without falling into any logical contradiction. Furthermore, I also argued that moral considerability of humans is attributed by humans to themselves, and that morality seems to have been changing, developing and improving evolutionarily through time. In this section, I will analyze Leopold's evolutionary conception of morality, his theory of three staged ethics, and show why Leopoldian land ethic is necessary.

2.4.1. How Are Ethics Evolving?

> When god-like Odysseus returned from the wars in Troy, he hanged all on one rope some dozen slave-girls of his household whom he suspected of misbehavior during his absence.
>
> This hanging involved no question of propriety, much less of justice. The girls were property. The disposal of property then, as now, a matter of expediency, not of right and wrong.
>
> Criteria of right and wrong were not lacking from Odysseus' Greece: witness the fidelity of his wife through the long years before at last his black-prowed galleys clove the wine-dark seas for home. The ethical structure of that day covered wives, but had not yet been extended to human chattels. During the three thousand years which have since elapsed, ethical criteria have been extended to many fields of conduct, with corresponding shrinkages in those judged by expediency only (Leopold, 1966, p. 237, and 1933b, p. 181, verbatim).

As I indicated, the above passages are from Leopold's "The Land Ethic," in the *Almanac*. But they are incorporated from an earlier work written in 1933, "The Conservation Ethic." When Leopold goes back to assess the moral human condition of three thousand years ago what he sees

first is that the “[c]riteria of right and wrong [conscience]” existed then. The fidelity of Odysseus’ wife to her husband is the evidence for the existence of these criteria. But secondly, and perhaps more importantly, Leopold sees that the scope that these criteria applied, that is the scope of moral considerability, was narrower than it is today. Since slaves were seen as mere properties, their extermination did not violate the criteria of right and wrong of that day. Slaves, as any other properties, were simply outside the scope of moral considerability. But today, at least in principle, no human being is kept outside the scope of moral considerability. As Leopold implies, we have extended our scope of moral considerability or moral responsibility in the course of history. Leopold continues to depict his evolutionary conception of ethics as follows:

> This extension of ethics, so far studied only by philosophers, is actually a process in ecological evolution. Its sequences may be described in *ecological* as well as in philosophical terms. An ethic, *ecologically*, is a limitation on freedom of action in the struggle for existence. An ethic, philosophically, is a differentiation of social from anti-social conduct. These are two definitions of one thing. *The thing has its origin* in the tendency of interdependent individuals or societies to evolve modes of co-operation. The *ecologist* calls these symbioses. Politics and economics are advanced symbioses in which the *original free-for-all competition* has been replaced, in part, by co-operative mechanisms with an ethical content (1966, p. 238, emphases added, cf. 1933b, pp. 181-82, almost verbatim).

While incorporating passages from “The Conservation Ethic” into “The Land Ethic,” Leopold needs to make some revisions in the last paragraph quoted above, although he repeats the first three paragraphs cited above word by word in the latter. He prefers “ecological” in place of “biological” in the second sentence; “ecologically” in place of “biologically” in the third; and “ecologist” in place of “biologist” in the sentence before the last in the paragraph just cited above. And in place of final sentence, Leopold stated the following in Leopold 1933b:

> Man elaborated certain advanced symbioses called politics and economics. Like their simpler biological antecedents, they enable individuals or groups to exploit each other in an orderly way. Their first yardstick was expediency (1933b, p. 182).

I believe that Leopold’s quite a dense sequence of thoughts on ethics in these two works deserve a closer look:

1. Leopold pursues the history of ethics back to about three thousand years ago. He believes that ethics have been extended to many fields since then and have undergone an evolutionary development through human history. And in his view, ethics cannot be thought distinct from ecology (or, as in Leopold 1933b, from biology).

2. Ethics might be described both ecologically, or biologically, and philosophically. Ecologically, or biologically, it "is a limitation on freedom of action in the struggle for existence." Philosophically, it "is a differentiation of social from anti-social conduct." And these two describe the same thing, namely an ethic. Thus Leopold underlines that ecology, and/or biology, has a definite impact on human conduct. For, human beings, in their struggle for existence, have to satisfy their primary needs, many of which are biological. In order to satisfy their needs, within their given biology (and within the given ecological conditions), they have to limit their freedom. This limitation, which is firstly biological and/or ecological, falls under the subject matter of ethics. On the other hand, humans are social beings, as Aristotle points out. Their struggle for existence occurs in a society. This brings forth another limitation, which falls, again, under the subject matter of ethics. If we combine two definitions, then ethic is a limitation on freedom of action of a human being in the struggle for existence, not as a lonely individual on earth, but as a member of society, members of which interact with and depend on each other.
3. Human beings, in their struggle for existence, have learned to develop various modes of cooperation, which have strongly supported their survival. These modes of cooperation have been new fields of conduct which have been incorporated, again, under the subject matter of ethics. From the biological, or ecological, point of view, these various modes of cooperation might be seen as symbioses. They are supposed to help humans in their struggle for existence. Human beings depend on each other, and they have increased their chance of survival by evolving various forms of cooperation in the course of their history. In this sense, politics and economics might be thought as elaborated forms of modes of cooperation in a human society. Thus, both politics and economics, fall under the subject matter of ethics, as well, or at least they should not be conceived distinct from ethics.
4. Why might Leopold have preferred "ecology" over "biology" when he incorporated above passages almost verbatim in "The Land Ethic?" Because, first, in his view, "ecology [is] the fusion point of sciences and all the land uses" (1939b, p. 273). Thus, in this sense, it is more encompassing than biology. Secondly, ecology has taught us "that all truths hold only within limits" (Leopold, 1935a, p. 217). Hence, the limits of man's

struggle for existence have been drawn by ecological ones, at least in as much as they have been drawn by biological and social ones.

5. Finally, we should not miss the revision that Leopold makes in the final sentence in "The Land Ethic" version quoted above. In 1933, he conceives politics and economics as means or symbioses which make individual or group exploitation possible "in an orderly way." However, in 1947, in the *Almanac*, he points out that politics and economics are advancements in evolution of ethics so that "the original free-for-all competition has been replaced, in part, by co-operative mechanisms with an ethical content." In my opinion, this revision is crucially important to understand Leopold's conception of ethics about the inception of it. Although, to my knowledge, Leopold does not refer to Hobbes or other social contract theorists in his works, the phrase "the original free-for-all competition" inevitably recalls the Hobbesean "state of nature." As it is known, according to Hobbes, in "state of nature" human beings have been in the condition of "war of all against all [*bellum omnium contra omnes*]" since there were no rulers to compel humans to obey the moral rules dictated by reason or the civil laws which were commanded by the sovereign. In order to get out of this insecure state, according to Hobbes, although humans were in unrestrained freedom, they have mutually agreed on a contract to obey rules which would be commanded by the sovereign. That is to say, they would agree to limit their freedom to gain safety. Similarly, Leopold describes ethics first, biologically, or ecologically, as "limitation on freedom of action in the struggle for existence," secondly, philosophically as "the differentiation of social from anti-social conduct." Leopold does not say directly, unlike Hobbes, that humans gave up their freedom in order to have a safer life. But he underlines that they were struggling to survive in the midst of wild nature, i.e., they were "free" as much as biological or ecological conditions permitted, and that there was a "free-for-all competition" for existence. Besides this, he points out that ethics have "its origin in the tendency of interdependent individuals or societies to evolve modes of co-operation." Thus we can say that, for Leopold, ethics have evolved from "the original [state where] free-for-all competition" predominated towards the state in which various forms of co-operative mechanisms have been developed in order to make possible the

> life of humans in society somewhat more comfortable and safer at the expense of limiting freedom of action.[21]

What I have drawn from Leopold's words, namely ethics have been invented and evolved by human beings in order to have a safer and comfortable life, are also supported by Leopold's description of ethics in his "Ecology and Politics" written in 1941. Leopold points out there that

---

[21] Callicott, too, thinks that the phrase "the original free-for-all competition" recalls "the state of nature" of Hobbes. But he does not seem happy with this connection between Hobbes's state of nature and Leopold's views about the inception of ethics in human communities. Therefore, he *unusually* casts doubt on Leopold's hypothesis about the first stage of ethics.

> Actually, it is doubtful that the first ethics dealt with the relation between individuals and not at all with the relation between the individual and society. (This, along with the remark that ethics replaced an "original free-for-all competition," suggests that Leopold's Darwinian line of thought has been *uncritically tainted with Hobbesean elements*. Of course, Hobbes's "state of nature," in which there prevailed a war of each against all, is absurd from an evolutionary point of view.) (Callicott, 1989c, p. 86, emphasis added).

Needless to say, Hobbes and Leopold have had far different motivations while speculating about the moral development of humankind. The former has tried to legitimize constitutional monarchy of the empire of Great Britain during a time the English Civil War had broken out. He, so to speak, has invented a hypothetical or fictitious "state of nature" where there were no rulers ("the sovereign") which would compel community members to obey "laws of nature" which were dictated by reason and existed even in "the state of nature." Leopold, on the other hand, had an evolutionary theory of three staged ethics in mind by means of which he suggested land ethic as a possible and necessary new stage to realize conservation purposes (Leopold's theory of three staged ethics will be explained in the subsequent section below).

As Callicott rightfully observes, it is difficult to conceive an isolated ethical stage (the first in Leopold's theory of three staged ethics) the rules of which coordinate relations between individuals only, but not between individuals and society. This first stage, in a sense, might be thought to resemble Rousseau's hypothetical "the pure state of nature" where human individuals generally lived alone and had not yet been spoiled with the evils of society. But Leopold seems to imagine, as Callicott agrees, a more Hobbesean "state of nature" in the first stage of ethics. Because, although he states that first ethics dealt with relations between individuals only, he does not seem to imply a stage where humans lived individually, i.e., without a society. For he manifestly declares that "[a]ll ethics … rest upon a single premise: that the individual is a member of a community" (1966, p. 239). That is why, as Callicott approves, the first stage of ethics seems more akin to the "state of nature" of Hobbes, even if this seems "absurd from an evolutionary point of view," as Callicott states. My point is that, Leopold's views, "tainted with Hobbesean elements" or not, especially his description of the third stage, i.e., "the land ethic," might be suggested as a new moral contract to establish "a society decently respectful of its own and all other life, capable of inhabiting the earth without defiling it" to leave behind the second stage in which we live like potato bugs which exterminate the habitat they live in without knowing that they exterminate themselves (see Leopold, 1923, p. 97).

humans intervened on the process of evolution on earth, and on behalf of their own species, by two significant inventions. These inventions have contributed a lot in making human beings the dominant species on earth in the course of time.

> When we arrived on the scene we raised the carrying capacity of the land for man by means of tools. Tools enable us to extract more livelihood from fever acres, i.e. they change the "take" side of our biotic equation.
>
> …
>
> [H]aving suspended the laws of carrying capacity by inventing tools, he next suspended the laws of predation by *inventing ethics*. These two manipulations of the natural order are highly interdependent. Tools cannot be made or used without peace; peace cannot be sustained without tools, for men who are hungry, either for food or other necessities, automatically fight (Leopold, 1941a, pp. 282-83, emphasis added).

Needless to say, human beings, at the outset, should have needed to find the means of survival in the midst of wildlife in which they had to struggle with many strong predators more than they needed to raise the carrying capacity for themselves. But, no doubt, invention of tools, or development of technology, very significantly contributed to increase the carrying capacity of humans on earth. Thus, invention of tools, or technology, has become one of the first significant interventions which triggered the great human impact on earth. Through the invention of various tools and development of technology, humans' share on natural resources has risen to unprecedented levels, incomparable with that of any other species inhabiting the earth. Some of what we have, in the end, is the following: human population has got closer to seven billion, about "forty per cent of the terrestrial primary production of plant material produced every year" is consumed by human economy, and more than hundred species are going extinct every single day (Birch, 2001, p. 1).

We had seen some of these in section 2.1.1. But, especially for the purposes of this section and of the present dissertation, Leopold's suggestion of humans' second "manipulation of natural order" seems more crucial. Leopold manifestly declares first that ethics are a human invention, and secondly that ethics are invented to suspend predation among human beings. In the end, technology and ethics have developed or evolved together, consolidated each other, and made human dominance on earth possible. In other words, technology which suspended the limits of carrying capacity of the land for human beings and ethics which suspended predation among them have together also suspended the conditions of "war of all against all." This is in

conformity with what I have drawn from what Leopold says in the *Almanac*. As we have seen, Leopold says there that "original free-for-all competition has been replaced, in part, by co-operative mechanisms with an ethical content" (1966, p. 238). And in Leopold 1941a he says that we have evolved from the state where we have "automatically fight[ed]" when we were "hungry, either for food or other necessities" to the one we have dominated the land through invention of technology and ethics both have jointly forced us to live in peace (p. 283).[22]

No doubt, Leopold is not unaware of the cases in which rules of ethics may not suffice to suspend the laws of predation or tools may not extend carrying capacity for humans indefinitely:

> Ethics are an adaptation without parallel in animal history. The success of ethical restraints depends entirely on mutuality of acceptance. We know, to our cost, that this mutuality of acceptance periodically breaks down, and that such breakdowns are followed by a reversion to the ancestral predatory order. Each such reversion becomes more destructive than the last, for organized predation, backed by tools, is far more fearsome than the unorganized individualistic combat prevailing in animals (p. 283).

Could more technology help us to sustain peace? This is what technologists suggest, Leopold says. "The technologists' cure for war is more technology" (p. 283). They believe that wars can be prevented by more technological development. They think that, by inventing new instruments, standards of living and carrying capacity for mankind can be raised indefinitely. Thus, through new developments in technology, it might be possible to foster the rules of ethics and continue to suspend the laws of predation. The more people have access to means of living without difficulty the more they will tend to mutually accept the laws of ethics. If some people still insist to violate the laws of ethics, they can be suppressed by means of various technological means (p. 283).

However, according to Leopold, this "technological recipe" is not sustainable.

> There are few savages today who are not aware that this technological recipe for civilization is, at least for the moment, a failure. Nations fight over *who shall take charge* of increasing the take and *to whom* the better life shall accrue. Even in peace-time the energies of mankind are directed not toward *creating* the better life, but toward

[22] It is interesting to note that Callicott, as far as I know, does not need to refer and question Leopold's views about the inception of ethics in Leopold 1941a, unlike he questioned Leopold's description of the first stage of ethics which was stated in Leopold 1933b and 1966, although he put Leopold 1941a in *The River of the Mother of God and Other Essays by Aldo Leopold* which he edited together with Susan Flader.

> *dividing* the materials supposedly necessary for it. From president to parlor-pink, from the economist to stevedore, all are preoccupied with dividing the means rather than building the end.
>
> As for ethics, each seems to write his code to fit his material needs. … Each political or economic group has such powerful tools that each lives in terror lest his neighbor use them (pp. 283-84, Leopold's emphases).

Technological development alone cannot lead mankind to happiness in peace. The World Wars have shown us this bitterly. Technology could only be means for a better life. Unless majority of mankind realizes that the end is to achieve good life rather than to fight for having some means, sustainable human welfare may not be possible.

> If science cannot lead us to wisdom as well as power, it is surely no science at all. … We may begin by admitting that the technological formula, in its early stages actually succeeded in raising carrying capacity, standards of living, and ethics. But this is no evidence that it will continue to do so indefinitely through greater and greater elaborations of the same idea. All ecology is replete with laws which begin to operate at a threshold, and cease operating at a ceiling (p. 284).

No doubt, technology helped us a lot to have a better life. But we should not be deceived by the comfort and ease provided by some new instruments. Thus Leopold makes us turn to ecology. It might help us "to appraise the probable soundness of the assumptions on which the whole modern structure is built" (p. 284). As he said earlier, "as the fusion point of sciences, and all the land uses, … [ecology might be] the place to look" (1939b, p. 273). It is full of evidence which remind us that human intervention and expansion in nature might have approached its limits.[23] Thus we need to change our perspectives so that we would not aim at to become more powerful only but also wiser. Therefore, we need to have our science as "the searchlight on [our] universe" rather than as "the sharpener of [our] sword;" we need to tend to be "the biotic citizen[s]" rather than "the conqueror[s];" we need to see the "land [as] the collective organism" rather than as "the slave" (Leopold, 1966, pp. 260-61).

---

[23] Leopold does not only think that human species have far outrun their carrying capacity on earth but also suggests that ecological destruction and genetic deterioration might be two other horsemen of the apocalypse, in addition to four, war, famine, pestilence and death (1941a, pp. 281-84).

2.4.2. Leopold’s Theory of Three Staged Evolutionary Ethics and Necessity of the Land Ethic as a New Moral Contract

Having started (or accelerated) the process of evolution of ethics by passing from the original state in which brutal or “free-for-all competition” for survival prevailed to the state in which co-operative apparatuses such as politics and economics which have some “ethical content” developed, and shown the futility of the “technological recipe,” Leopold posits his theory of three staged ethics. In the first stage, “ethics dealt with the relationship between individuals” (Leopold, 1966, p. 238, and 1933b, p. 182, verbatim). Leopold does not imply a pre-social stage here. He likens this first stage of ethics with the Ten Commandments. As it is known, although the Ten Commandments involve orders which have social implications, they address directly to the individual human being about what s/he should do, or what s/he should abstain from doing. In the second stage, it was needed to regulate the relations between individuals and society: “Later accretions dealt with the relationship between the individual and society” (1966, p. 238, and 1933b, p. 182, verbatim). According to Leopold, the Golden Rule and democracy exemplify this stage best. Golden Rule suggests treating others in such a way as we would expect others treat ourselves, or not treating others in such a way as we would not like to be treated. It underscores the significance of reciprocity between individual and society. And democracy, in Leopold’s view, serves “to integrate [human] social organization to the [human] individual” (1966, p. 238, and 1933b, p. 182, verbatim). But we, human beings, are not alone in this world. There are innumerably many species, most of which have emerged before us. We share the earth with its soils, waters, air together with these various species. Leopold calls all the constituents of nature together, and as a part of it ourselves, the land. For the time being, the land, excluding ourselves, is still mostly thought to be a property of human beings. That is to say, “[t]he land-relation is still strictly economic, entailing privileges but not obligations” (1966, p. 238, and 1933b, p. 182, verbatim). But, some of us have begun to realize that we need also an ethic which deals with the relationship between us and the rest of the land, with “animals and plants which grow upon it” (1966, p. 238, and 1933b, p. 182, verbatim).

Leopold explains the role of ethics for a community and the scope of land ethic as follows:

> All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. His instincts prompt him to compete for his place in

> the community, but his ethics prompt him also to co-operate (perhaps in order that there may be a place to compete for).
>
> The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land (1966, p. 239).

Thus, in Leopold's view, there is a dialectical relationship between our instincts which prompt us to compete to have a better place in the community of which we are a part and the ethics, which are in the continuous process of evolution and which prompt us to cooperate with the other members of the community. Why do we need to cooperate? Leopold's answer, even if given in parenthesis, is interesting. He says that human individuals cooperate in order to maintain the community which makes their competing for a place possible. In other words, we would not be able to compete for a place, or satisfy our instincts properly, if we did not have a community. Community is sustained through cooperation or harmonious relationship of its members. Till the present, rules of ethics, and codes and laws enacted later, have mostly served to regulate the relationships within the human community. But since we have taken into account only the human community and the interests of human beings in it, without noticing much to what was happening to nonhuman constituents of nature, we are faced with the ecological problems that threaten both nonhuman and human life on earth. By positing land ethic, Leopold suggests extending the limits of our responsibility and community of which we feel a part. This is a quite plausible remedy that Leopold recommends for taking a step towards the resolution of ecological problems which have emerged mainly due to the human impact. In this sense, we can think of land ethic as a new moral contract which allows for realizing our instincts to compete for a place, as the older ones do, but this time being aware that we are the members of not only human community but at the same time of a larger community, namely biotic community or the land. So we should try to maintain biotic community as well as human community. As moral agents, we are required to fulfill our duty which stems from the responsibility of membership.

As Leopold points out this is a new step in the evolution of ethics. As we, human beings who are moral agents, accept responsibility for human beings who are not moral agents, we can accept responsibility for nonhuman members of nature as well. We are at the threshold of a new step which will be taken. Indeed some of us, especially many conservationists, had already taken this step. As Leopold says, they can be thought as the embryo of the third step that humanity will hopefully take in its moral evolutionary development. No doubt nonhuman members of the land cannot be held responsible from their acts, as human beings who are not moral agents are not

held morally responsible from their acts. That is to say, the new moral contract declares that all the constituents of nature are morally considerable, although only human beings, who are moral agents, are morally responsible for the protection of the whole community. And by accepting this contract, as conservationists already have done, we accept enlarging the scope of our moral responsibility. In Leopold's nice words, this is a new thing under the sun, and it makes us objectively superior with respect to the beings, human or nonhuman, who accept less or no moral responsibility.

Leopold was presumably the first who dared to state that it was our moral responsibility to protect whole nature, or the land which involves soils, waters, plants, and animals. According to Leopold, this enlargement in the scope of human moral responsibility is the third step in the evolutionary development of ethics. And he asserts that this new ethic, which we need to improve our relation with the land, is evolutionarily possible and ecologically necessary (1966, p. 239, cf. 1933b, p. 182).

Leopold anticipates land ethic as an evolutionary possibility, by stating his conviction for a new step in the evolutionary progress of ethics. As he says, "[e]thics are possibly a kind of community instinct in-the-making" (1966, p. 239, and 1933b, p. 182). And he believes that conservation movement is the embryo which will end up in full realization of this third step.

But why is the realization of this step ecologically necessary? One of the most novel and significant aspects of Leopold's land ethic is its rising on the resources of ecological and environmental knowledge. In other words, land ethic has its force and energy from the data provided by ecology and environmental sciences. And these data compel us to accept extending the boundaries of our responsibility to the protection of the whole land. In this sense, Leopold's land ethic is naturalistic.

We need a new ethic. Because existing ethics are able to coordinate relations within human community. But we also have countless number of nonhuman entities with which we might have direct or indirect relationship. Human population has got bigger and bigger and the human civilization has got more and more developed and complicated through time. In the end, human encroachment has had an immense impact on nature. However, many environmental sciences, especially ecology, provide undeniable evidence which shows that the impact of humans on

nature has resulted in considerable deterioration. Many forms of pollution, accumulation of hazardous waste and toxic chemicals, deforestation, erosion, desertification, depletion of ground water, and increasing rate of species extermination are some examples of anthropogenic destruction of nature. Perhaps, a new ethic which will serve as a mode of guidance which coordinates relations between human beings, human society and nonhuman entities might open a way out of this problem. Indeed, some wise people in the past (e.g., Ezekiel and Isaiah) had pointed out that it was wrong to harm not only human beings but also nonhuman ones, much earlier a time than huge impact of human beings had emerged (Leopold, 1923, p. 94; 1933b, p. 182; 1966, p. 239). Happily, a minority of people, who are aware of the need to regulate the relations between humans and nonhuman beings, have also emerged recently. They are known as conservationists. They do not have a unanimous view to halt the ongoing deterioration of nature, though. For instance, as the species extinction has accelerated, some conservationists have solely concentrated on saving endangered species from extinction. However, species extinction is just an effect of land deterioration (Leopold, 1933b, p. 190). All of the species on earth depend on land which involves soil, water, animals, plants, and people together (Leopold, 1942a, p. 300; 1944, p. 310; 1947a, p. 336; 1966, p. 239). Land is not a constant which is immune from the deeds of the beings which depend on it (Leopold, 1933b, p. 190). Therefore, conservation movement which aims at overcoming an effect, e.g., species extinction, without taking into account the real cause of this effect, will presumably not succeed. Thus the new ethic, which will coordinate relations between humans, human society, and the nonhuman members of the land, should aim at the cause of the deterioration of nature, rather than some of the effects of it.

Leopold urges us to question the impact of our deeds on nature. We should interrogate the consequences of governing the land by selfish economic interests only, such as irresponsible use of chemical fertilizers, pesticides, herbicides, or deforestation, or building dams, hydroelectric power plants, etc. Hence we have to look at ourselves, first. Who are we, or more particularly, what is our role in nature? We have pretended to be the masters of nature till this time. But do we not see how weak we are when an earthquake, or a flood, presumably triggered by our reckless use of the land, results in thousands of deaths? Is it not the time to question this malignant role of mastery of nature? Is nature or land our enemy? Can we not cooperate and live in harmony with it, instead of trying to conquer it?

However, how could land ethic achieve its aim to make moral agents feel responsible for a much larger community, although most of them have been accustomed to take and use nonhuman members of nature, simply and only, as resource for hundreds of years?

> A land ethic of course cannot prevent the alteration, management, and use of these 'resources,' but it does affirm their right to continued existence in a natural state.
>
> In short, a land ethic changes the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such (Leopold, 1966, p. 240).

No doubt, this change will not take place all of a sudden. Many human beings will continue to exploit the nonhuman members as resources. But land ethic declares that nonhuman members, too, have the "right to continued existence" as much as humans do. It reminds human members, who are capable of moral agency, that the nonhuman members, too, deserve respect as much as human members do.

Leopold emphasizes that by accepting the land ethic we will agree to be a member of biotic community rather than pretend to be the master of it (1966, p. 240). This is the crucial step. Unless we admit abdicating the role of master or conqueror, and abiding by the new role, we can hardly achieve to stop deterioration of the land. As a further and complementary step, the land ethic not only requires us to change our role from the master, or conqueror, to "the biotic citizen," but also requires us to treat the land as "the collective organism" of which we are a part, rather than the land as "the slave." Thus, we should improve our conception of nature in such a way to recognize that nature and its constituents are not properties belonging to human species. As we achieved to abolish human slavery, we should conceive whole nature as a bigger community and abolish slavery of nonhuman constituents of nature, as well. The role of science, too, must be reconsidered. Until this time, we have mostly exploited scientific knowledge to realize our economic self-interests. Science has served as "the sharpener of [our] sword" in our war against nature. In the new era, Leopold suggests, science will have the role of "searchlight on [our] universe", so that we will understand nature, realize our responsibility for preserving the health of it, and learn to live in harmony with it (1966, pp. 258-261).

To summarize, Leopold urges us to enlarge the boundaries of our responsibility, from ourselves to whole nature. We need an ethic principles of which are able to encompass and regulate the relationships not only within human community but also within the whole biotic community.

This extension in the scope of ethics necessitates changing our role in nature. We will no more be pretending to be masters or conquerors of nature, rather we will understand and admit to be plain members of the biotic community. Thus, the land, together with all its constituents, is no more our slave; as a part of it we shall live in accord with it. Science is no more a mere instrument of human beings to abuse the land; rather, as it has inspired, and urged us to change our ethical view, it will continuously inform us while we try to accustom our new role and to learn how to live harmoniously with nature.

But do we not need a set of obligations to force us to leave our old habits and to endorse and apply the requirements of the land ethic? In Leopold's view, individual ethics is "the basis of conservation policy" (1937, p. 243). That is why he believes that the pressure of "personal sense of right and wrong," more than that of law or money, could effectually force people to realize the need for conservation (p. 244). "Obligations have no meaning without conscience," says Leopold, and adds that, "the problem we face is the extension of the social conscience from people to land" (1947b, p. 341; 1966, p. 246, verbatim).

How can we extend the social conscience from people to land and thus walk through the third stage in the evolution of ethics? According to Leopold, we need to know "whether the mass-mind *wants to* extend its powers of comprehending the world in which it lives, or, granted the desire, *has the capacity to do so*" (1933b, p. 192, Leopold's emphases). Although he asserts that this is the ultimate issue in conservation, he frankly says that he does not know whether majority of people have a sufficient desire to understand the world and capacity to understand it, yet. However, in his opinion "a sufficiently enlightened society, by changing its wants and tolerances, can change the economic factors bearing on land" (p. 192). Thus although the land ethic already "reflects the existence of an ecological conscience," we need, before positing obligations, to get rid of the obstacles in front of the widening and deepening of ecological conscience and consciousness through the hearts and minds of all members of *Homo sapiens* (Leopold, 1966, p. 258). For instance, we need to revise our educational and economic system which does not support "an intense consciousness of land" (Leopold, 1941c, pp. 197-198; 1944, p. 319; 1966, p. 261). Moreover, we need to reconsider our attitude toward land. We have considered land as if it were an adversary, and we have abused it. For we have regarded it "as a commodity belonging to us. [However,] [w]hen we see land as a community to which we

belong, we may begin to use it with love and respect" (Leopold, 1966, pp. xviii-xix; cf. also p. 240).

Furthermore, in order to construct an ethical relation toward land, we should assess its value for us as it deserves. We should learn to appreciate its value. If we can realize its value in our mind and conscience, then we may "quit thinking about decent land-use as solely an economic problem, [and] [e]xamine each question in terms of what is ethically and esthetically right, as well as what is economically expedient. A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise" (p. 262). In other words, we, human beings who are moral agents, should realize in our mind and feel in our conscience that we are responsible for preserving the integrity, stability, and beauty of the land, as we accept responsibility for humans, irrespective of their moral agency. We will continue to harvest various utilities of the land, as we have been doing for thousands of years. And happily we are beginning to realize, at the same time, that good land-use should not rest only on exploiting the economic value of the land, but also on observing, respecting and preserving the non-economical values of it, ethical and aesthetic aspects of it, besides economical ones.

2.5. Significance of Raising Consciousness about Nature

I pointed out in section 2.1.2 that we had better question the mode of production that we have been predominantly applying for more than two hundred years rather than cast doubt on all humankind as if every single human being is equally responsible for the environmental degradation we are faced with.

Murray Bookchin, to my knowledge, more emphatically than any other environmental philosopher, draws our attention to the mechanisms behind the anthropogenic environmental impact rather than to humankind as a whole, as the present dominant species of the world. According to Bookchin, environmentalist approaches which take the existing social order for granted cannot effectually solve the problems we are faced with. In his opinion, social, political and economic mechanisms, which strongly shape ways of lives of people, rather than so called anthropocentrism, are the main reason which leads to environmental degradation. Thus we should concentrate more on reshaping these mechanisms than on blaming humankind in the abstract.

Although we still have some primitive modes of production here and there, the capitalist mode of production is the dominant one in today's world. The driving power for this mode of production is profit. And this driving power might create a blind passion in the owners of means of production so that almost every way seems legitimate to increase it. The most classic and perhaps innocent way to raise the profit is exploiting the labor power of the workers. I said that this is the most innocent way, because today much more malicious ways are implemented than the ones at the beginning of industrial revolution. For instance, we do not only have a huge military industry in which labor power of workers are exploited, but we, i.e., some members of human species, create feelings of enmity, insecurity, conflicts, and, in the end, even wars in regions where the "sublime" western way of life (should I say "democracy?") is not pursued. Otherwise, how would it be possible to consume the products that this industry produces; or how would it be possible to sell these products and establish new factories which produce new modern death machines?

Furthermore, the blind passion for profit leads to a continuous increase in production, usually more than we, especially those who live in developed countries, actually need. There are substantial (side) effects of the capitalist mode of production. New diseases, psychological disorders are created and/or pervaded, such as obesity, bulimia, depression, anorexia nervosa, stress or distress. New needs to be satisfied are created. Many things, which were thought as luxurious in the past, are thought as needs in the present. We advertise extensively in order to provoke consumption. Moreover, products get cheaper and cheaper day-by-day so that the number of people who could buy them increases. To sell more, to make greater profits, we produce cheaper and unsuitable goods. The capitalist mode of production makes us, so to speak, some sort of bulimics. Like bulimics we insatiably consume, and then inevitably produce waste. The more we produce and consume, the more we pollute and deteriorate the environment. And in the end, the anthropogenic environmental impact has risen to levels that our planet could no more bear. Therefore, if anthropocentrism is another name of the capitalist mode of production, we should do something to change it. Or if anthropocentrism is another side effect of capitalist mode of production, we had better question and do something to change the main cause. In other words, if we sincerely care for the environment, then our problem is mainly with the capitalist mode of production, which is oblivious of nature as it has worked for hundreds of years, rather than with one of its symptoms.

Nevertheless, big words sound good but not enough to solve the problem. The capitalist mode of production has proved its sturdiness in spite of many crises and depressions it has undergone. Furthermore, the attempts to change it in some parts of the world could not succeed; almost all of them resulted in worse outcomes. Thus, although we can and should eagerly insist to make real our belief that "a better world is possible," we had better know that our desire might not come out soon.

On the other hand, however, environmental problems we are faced with are urgent, presumably too urgent to wait for the reconstruction of a new social and economic order. Although the final solution has to be political, we should not refrain from doing any attempt which can be implemented even under existing social order.

As we all know, capitalism provides diverse opportunities for human beings, most of which seem indispensable for individuals who are accustomed to live with them, despite the huge problems it leads to. Nevertheless, it is a fact that consumerism, individualism, need and demand for increase in production and profit, which are some of the driving forces of capitalism, have accelerated destruction of nature. But, how could it be possible to enact ethical norms and positive laws realization of which would set limit to economic progress and short term benefits of humans, under existing and dominant mode of production?

Leopold does not seem to like capitalism, either. In his view, "[t]he disruptive movements which now threaten the human culture are born not on the land … but in the factories and offices … and in the capitols where the rules of division are written" (1941a, p. 284). "We assume, I think naively," he says, "that increasing 'take' (i.e. more extraction, conversion, and consumption of resources) always raises standards of living. Sometimes it merely raises population levels" (p. 285). Furthermore, he thinks that existing "educational and economic system is headed away from … an intense consciousness of land," and this is "the most serious obstacle impeding the evolution of land ethic" (1966, p. 261). But he is not happy with the posited alternatives, either. In his view, all modes of production, or "all the new isms, – Socialism, Communism, Fascism" are no better than Capitalism (1933b, p. 188). They are "as identically alike as peas in a pod" (p. 188). For all assume that good life will follow with the "distribution of more machine-made commodities to more people" (p. 188). All suggest "*salvation by machinery*" (p. 188, Leopold's emphasis).

Rather than establishing a new political system, Leopold suggests an evolutionary transformation in the course of time. He sees conservation movement as the nucleus or the embryo of this transformation. As it develops and pervades, Leopold hopes, dormant consciousness of human beings about nature will be activated. In Leopold's view, one of the foremost questions of conservationists is to try to activate this supposedly widespread consciousness.

> We are confronted … by a contradiction. To build a better motor we tap the uttermost powers of the human brain; to build a better countryside we throw dice. Political systems take no cognizance of this disparity, offer no sufficient remedy. There is, however, a dormant but widespread consciousness that the destruction of land, and of the living things upon it, is wrong. A new minority have espoused an idea called conservation which tends to assert this as a positive principle. Does it contain seeds which are likely to grow?
>
> …
>
> The insignificance of what we conservationists, in our political capacity, say and do, does not detract from the significance of our persistent desire to do something. To turn this desire into productive channels is the task of time, and ecology (pp. 189-190).

Nevertheless, conservation movement is not an alternative to a social and economic order. If the driving powers of existing socioeconomic system do not support, but is in conflict with protection of nature, how would raising consciousness about nature help? However, one need not think that establishing a new ethic, and raising consciousness and conscience about environmental problems, and trying to establish a new social order are mutually exclusive issues. It is a fact that environmental problems are getting more and more complicated and harder through time. Under existing system or some other one, we will continue to have these problems. It might be true that, under existing system a new ethic might be ineffective to overcome them. But, on the other hand, we might be too late to save nature, if we spend all our effort to change the social and economic order. Furthermore, do we not need a mature conception and consciousness, or a proper mode of cooperation, thus an ethic that will guide our relations with nature under any socioeconomic system? In this sense, trying to raise consciousness about ecological problems via a new ethic is no less significant than trying to change the existing social order. These activities can very well coexist.

Consequently, to begin with at least, a new conception of ethics, similar to the land ethic, is necessary, if we really care for the survival of human life on earth. But how can we convince

ourselves and other people, who are habituated to the merits of capitalist way of life, to sincerely want to live in accordance with the norms of such an ethic? Or how is it possible to enact laws or set of obligations which force us to endorse and apply the requirements of the land ethic? Would it be realistic to expect politicians to enact such laws although posterity has no right to vote in the next elections? Indeed, Leopold is quite aware of these problems. For he knows that we need to have, before positing obligations or enacting positive laws to protect nature, a deep "ecological conscience" pervaded through the hearts and minds of most of the human individuals (1947b, p. 343). Most of us know that harming our fellow species members, without some plausible reason, is wrong. Similarly we should learn to know, by all our heart, that doing unnecessary harm to nonhuman constituents of nature is wrong, too. So "the problem we face," as Leopold points out, "is the extension of the social conscience from people to land" (1966, p. 246, and 1947b, p. 341, verbatim). Thus, those who already have this conscience, conservationists in particular, should spend their time and effort to spread ecological conscience and consciousness through the hearts and minds of other members of human species.

Leopold believes that education might be an effective means to make people aware of ecological problems, and further, move them to resolve these problems (1941c, pp. 197-198; 1944, p. 319). Nevertheless, although he agrees, "by all means," that we need "more conservation education," he is in doubt whether education alone might suffice to move people for conservation objectives. In his view, what is lacking (both in the texts and preaching of conservationist movement and educational volumes) is conscience, ecological conscience, which "implies a capacity to study and learn, as well as to emote about the problems of conservation" (1947b, pp. 343). For, unless we mutually agree on accepting sincere responsibility for conservation, we cannot have a reasonable progress in restoring and preserving nature. And we can feel responsibility for something which we subsumed under our universe of conscience. So, how could people come to accept responsibility for something which was not yet within their universe of conscience? What would be our means other than education to convince people to accept responsibility for conservation of nature?

> No important change in human conduct is ever accomplished without an internal change in our intellectual emphases, our loyalties, our affections, and our convictions. The proof that conservation has not yet touched these foundations of conduct lies in the fact that philosophy, ethics, and religion have not yet heard of it (p. 338).

Therefore, we need to endorse conservation as a way of life, and in order to have conservation as a way of life, as something worth including in our universe of conscience, we need the help of philosophy, ethics, and religion, human inquiries which deal with conscience more than sciences. People who study in these areas have not yet sufficiently pondered upon ecological problems. When they do, this would be great help to conservation education to raise awareness about ecological problems and make people feel the problems of conservation in their hearts and minds.

Being disappointed, at times, with the results of conservation education, Leopold hopes that "the present conservation movement" would serve "as the embryo" for the spread of ecological conscience and consciousness through the hearts and minds of most members of *Homo sapiens*, and that the land ethic would gain mutual approval among human beings in the course of time.

> The extension of ethics to this third element in human environment is, if I read the evidence correctly, an evolutionary possibility and an ecological necessity. … Individual thinkers since the days of Ezekiel and Isaiah have asserted that the despoliation of land is not only inexpedient but wrong. Society, however, has not yet affirmed their belief. I regard the present conservation movement as the embryo of such an affirmation.
>
> An ethic may be regarded as a mode of guidance for meeting ecological situations so new or intricate, or involving such deferred reactions, that the path of social expediency is not discernible to the average individual. … Ethics are possibly a kind of community instinct in-the-making (Leopold, 1966, p. 239, cf. 1933b, p. 182, almost verbatim).

As we have seen above, Leopold manifestly declares that existing educational and economic system is the most important hindrance before the growing of the embryo of conservation movement. He is not happy with the capitalist mode of production in the least. And he acknowledges the necessity for the "reorganization of society" (1934c, p. 210). But he does not suggest a well-described alternative system, nor does he like suggested alternatives. He seems to believe that humans would come to mutual agreement on the necessity of an ethic, like his land ethic, in the course of time. He seems to expect an evolutionary transformation, even if he believes that this transformation is ecologically necessary. On the other hand, Bookchin seems to endorse more revolutionary than evolutionary transformation to resolve environmental problems. In his view, "making a few small changes would not solve the ecological problem — on the contrary, a transformation into a rational, egalitarian, and libertarian society was necessary" (Vanek, 2001, p. 2). But, Bookchin also emphatically points out that "the most important thing

we are faced with today is to raise consciousness" (p. 2). Thus Leopold and Bookchin seem to meet at a point, namely "raising consciousness" about the environmental problems. To be honest and realistic, this seems the most reasonable resource that we can cling to, for the time being, without losing our hopes and halting our efforts to establish a better world. Evolution takes time. As Leopold rightfully states "[i]t has required 19 centuries to define decent man-to-man conduct and the process is only half done; it may take as long to evolve a code of decency for man-to-land conduct" (1947b, p. 345). If the land ethic is the third step that will be taken in the evolution of human morality, as Leopold anticipates, it should first be instilled in the conscience and consciousness of human beings.

Thus, to raise consciousness and conscience for the health of the land, and to protect biodiversity for the future generations' right to live in a world no less prosperous than ours, and for the survival of life on earth in its at most diversity, those of us who are already infected by ecological literacy and conscience, have to struggle by means of every possible way we can do, and especially by the help of science and philosophy. Until this time, scientific knowledge has mostly been exploited to make more profit, to realize economic self-interests. In Leopold's words, science has served as "the sharpener of [humans'] sword" in their war against nature. In the new era, Leopold suggests, science will have the role of "searchlight on [our] universe" so that we will form an "ecological conscience" which will lead us to realize our "responsibility for the health of the land" (1966, pp. 258-61). To be sure, this, too, is not readily applicable or realizable under existing conditions; but there are at least promising sparks which make us hopeful for the future. Although science and technology mostly have served as instruments, and blindly and irrespectively of environmental outcomes, to master nature, scientists, today, from various disciplines, such as biologists, soil scientists, climate scientists, ecologists work hard to show us the danger we are in. As we know more about the problems of our world through the veracious information provided by sciences, our, hence politicians', consciousness about these problems will hopefully pervade and deepen.

On the other hand, we will need the contribution of philosophy and ethics as well, not only for raising consciousness and responsibility toward environmental problems but also for checking the veracity of the information provided by sciences and for questioning and conceptualizing the limits and the problems of our world. Since the problems we have have been diversified together with the developments in science and technology, in production methods, and hence in needs

and capacities of human beings, environmental philosophy and ethics have to take into account these new developments and posit new theories which are able to encompass, formulate and help to solve these problems. While doing this, philosophers had better be able to avoid overpopulating conceptual realm with concepts that mystify or conceal the truth behind the problems.

2.6. Conservation under Human Dominance

Statistical data given by environmental scientists show, without any doubt, that human species have caused enormous change in the history of life of the planet. As Jeffrey D. Sachs states, we, knowingly or unknowingly, directly or indirectly, are pushing "the others over the cliff," presumably more than 100 species every single day (2008, p. 72). This is really a devastating and irretrievable impact on nature.

But paradoxically only human beings can perceive this as a problem. And only human beings can change this negative tendency, assuming they will continue to survive. That is why Leopold rightfully says that conservation will be realized under human dominance. Conservation, in other words, is a human and humane activity.

> Conservation is the attempt to understand the interactions of … components of land [soils, water systems, and wild and tame plants and animals], and to guide their collective behavior *under human dominance* (Leopold, 1942c, p. 199, emphasis added).

No other species but ours can recognize and act to change the situation that we have led to. We do not expect that plants, rivers, lakes, or even many charismatic animals, many of which physically are much stronger than us if we do not cheat by various instruments to defeat them, will revolt to end the human dominance and establish a better world. If we do not attempt to do something, and continue to live as we have done for hundreds of years, diversity of life will continue to diminish. We can only think and try healing the world that we have wounded. This is something ecology has taught us.

> One of the penalties of an ecological education is that one lives alone in a world of wounds. Much of the damage inflicted on land is quite invisible to laymen. An ecologist must either harden his shell and make believe that the consequences of science are none of his business, or he must be the doctor who sees the marks of death in a community that believes itself well and does not want to be told otherwise (Leopold, 1966, p. 197).

We may like it or not, the earth on which we live together with nonhuman members is wounded, and mostly due to our reckless acts. This is one of the lectures that ecology has taught us. Most of the human beings are not aware of this fact yet, or do not care when they are told of it. Because, in the present situation, the more the earth is wounded the more comfortable life human beings seem to have.[24] But it is highly controversial whether this will take too long. The scientific findings show that it will not. However, since most of the human beings tend to concern with the present and themselves more than the future and others, the job of conservationists or ecologists is not an easy one. For they have to convince people that they live in a world full of fatal wounds which need to be healed as soon as possible. Furthermore, they should know that the people they will convince are not aware of the conditions they are in nor do they want to learn that these conditions, in fact, are bad for the future of life in this planet.

On the other hand, nature without humans would presumably heal most of the wounds by its own dynamics, and most probably it would do this faster than the case with humans. But can we think this as a viable alternative? Could Leopold have thought it as an alternative?

To my knowledge, there is no evidence, in Leopold's works, which shows that he imagined a world without human beings. He does not suggest equal moral consideration for human beings and nonhuman ones, either. There are many passages in Leopold's works that he seems to have motivations which might be qualified as anthropocentric. Nevertheless, we have seen that he criticizes "anthropomorphism," too (1923, pp. 95-96). Furthermore, he is very well aware of values of human kind that distinguish it from nonhuman beings, including values which make humans superior to the beasts. This does not make him an advocate of anthropocentrism, of course. Rather, according to Leopold, the values which make human beings superior to the beasts are the ones which show that we, and only we, have the capacities to accept responsibility for the beings other than ourselves. In other words, in Leopold's view, we are superior to the beasts, because only we can accept that beings other than ourselves are morally considerable.

---

[24]This is an unfortunate fact for especially those who live in so called developed countries. The economic activity pursued in these countries has the largest share on the environmental impact created by the whole human species on earth. If all countries in the world reached to the level of "development" of an average industrialized country under existing conditions of environmental awareness and conscience, anthropogenic environmental impact, no doubt, would be much worse.

However, he is also aware of the fact that conservation is an activity which would be conducted "under human dominance." As I pointed out above, we do not expect lions, tigers or elephants or any nonhuman species take up the duty for conservation. Most probably, Leopold would not have expected this, either. Although mostly we, human beings, are responsible for the current wounded situation of nature, only we can consider restoring it. But only those of us, who have the conscience, consciousness, and the wisdom for mourning for an extinct species can recognize the necessity of saving nature. Volunteers of conservationist movement, make Leopold hopeful about the future. They are the embryo which he hopes to grow and stop deterioration of nature. The special capacities which Leopold thinks that make us objectively superior with respect to nonhuman beings need not make Leopold or us anthropocentric. But they remind us that we are different from other beings. Let us remember once more Leopold's words about objective superiority of human beings.

> For one species to mourn the death of another is a new thing under the sun. The Cro-Magnon who slew the last mammoth thought only of steaks. The sportsman who shot the last pigeon thought only of his prowess. … But we, who have lost our pigeons, mourn the loss. Had the funeral been hours, the pigeons would hardly have mourned us. In this fact, rather than in Mr. Du Pont's nylons or Mr. Vannevar Bush's bombs, lies objective evidence of our superiority over the beasts (1966, p. 117).

The responsibility of the deterioration of nature is mostly on the shoulders of human species. We have wounded nature. But only we can think about what we have done. Only we can consider correcting what we have led to. Only we can worry about the future of the planet. Only we have the capacities to accept responsibility for ourselves and others. A bear which collapses the home of bees, a natural beehive, for instance, to satisfy its desire for honey never considers the damage it makes. An overcrowded deer herd may seriously harm a forest. But a deer does not know what it does except satisfying its instinct. On the other hand, we know that for the sake of nature, or for the health of nature, an average human individual may not be more valuable than many nonhuman constituents of nature. If human beings are somehow extirpated, or to be modest, if they were much less violent while utilizing natural resources, it is more probable that the wounds of nature would tend to recover more quickly. As Leopold points out, "the less violent the man-made changes, the greater the probability of successful readjustment in the pyramid [of biotic community]" (1939b, p. 270). If we could "think like a mountain," as in Leopold's striking analogy, we would realize that wolves are more nature friendly, or more valuable than many humans for preserving the stability, integrity and beauty of the mountain. Frankly, we are not as

essential as bees, fungi, soil, water, air, and many other constituents of land for the continuance of life on earth. Let us not consider decreasing human population by severe measures that we think suitable for nonhuman members of the land. Should we give up human activities which aim at suspending the carrying capacity for humans? We still have many countries average life expectancy of which is less than 40 years, as it was the case in the world of middle ages. But in the present, development in medicine, public health, and health care increased the human life expectancy to more than eighty years in most of the developed countries. Should we give up technological and scientific studies which promote human health and life expectancy? Should we give up constructing big and developed hospitals, research centers, universities, factories producing medicines, or other artifacts for the sake of human welfare, and all other facilities which mainly aim at improving the living conditions of the human members of the land? Should we give up constructing buildings which serve for human recreational purposes, such as theaters, concert halls, swimming pools, gyms, hotels, etc.? Frankly speaking, none of these human activities contribute much "to preserve the integrity, stability, and beauty of the biotic community" (Leopold, 1966, p. 262). Is it absolutely right to do everything which "tends to preserve the integrity, stability, and beauty of the biotic community," or is it categorically wrong to do something which "tends otherwise?" Should we give up, for instance, spending time and energy to extend the life time of human beings who suffer from fatal diseases such as cancer, Alzheimer's, AIDS, etc.?

No. We simply cannot do these. I am not able to provide a convincing argument for either strong anthropocentrism or nonanthropocentrism. I can only assert that we ought to find ways to save the planet "under human dominance," at the expense of being somewhat "speciesist." Aldo Leopold, too, was very well aware of these facts. And immediately after he declared his well-known maxim for the good of the biotic community, he says the following:

> It of course goes without saying that economic feasibility limits the tether of what can or cannot be done for land. It always has and it always will (1966, p. 262).
>
> By and large, our present problem is one of attitudes and implements. We are remodeling the Alhambra with a steam-shovel, and we are proud of our yardage. We shall hardly relinquish the shovel, which after all has many good points, but we are in need of gentler and more objective criteria for its successful use (1966, pp. 263-64, cf. Leopold 1933b, p. 185).

I wish Leopold should have made us know the limits and practicability of the "gentler and more objective criteria" for the successful use of technology in conformity with the good of the land. But it is manifest that he does not suggest us being unmindful of dynamics of human economy. Nor does he suggest us suspending technology which was invented to suspend carrying capacity for human beings. Although it is not easy to work with a steam-shovel to create a work of art, and it has many risks, too, we can achieve many good things with the help of technology as we have, at times, done, for protecting the land, as well. Thus we do not need to give up technology to construct an ethically and aesthetically right relation with the land.

In short, Leopold does not suggest us nonanthropocentrism. He was a man of practical wisdom and never went after dreams which could not be realized in practical life. In his "Game and Wildlife Conservation," he responds to the ornithologist T. T. McCabe who criticizes his views on game and wildlife management for they are incompatible with genuine wildlife preservation. Leopold, after describing his position as an *intergrade* "who shares the aspiration[s] of both [protectionists and sportsmen]," says the following:

> Mr. McCabe's game policy … consists of a system of *personal wishes* which might be realized if America consisted of 120 million ornithologists, whereas mine is a system of *proposed public actions* designed to fit the unpleasant fact that America consists largely of businessmen, farmers, and Rotarians, busily playing the national game of economic expansion. Most of them admit that birds, trees, and flowers are nice to have around, but few of them would admit that the present "depression" in waterfowl is more important than the one in banks, or that the status of blue goose has more bearing on the cultural feature of America than the price of U.S. Steel (1932a, p. 165, Leopold's emphases).

Thus Leopold suggests being moderate, realistic and taking into account the conditions we are presently in. He does not suggest policies which appeal only to the wishes of some minority, even if this minority seems to be more heedful of nature. His attitude, as he says, is public opinion based, result oriented, in short pragmatist. It is an undeniable fact that vast majority of people in the world go after their own narrow egotistic interests. For many people development is tantamount to economic enlargement. For majority of the people who have to fight for satisfying their basic needs, dealing with problems of nature is a fantasy of a few idle people. Then conservationists, cannot act as if every human being in the world are ready to act to conserve nature in the most stringent ways. Furthermore, Leopold does not suggest a way of life which rejects benefiting fruits of technology, either.

> I realize that every time I turn on an electric light, or ride on a Pullman, or pocket the unearned increment on a stock, or a bond, or a piece of real estate, I am "selling out" to the enemies of conservation. When I submit these thoughts to a printing press, I am helping cut down the woods. When I pour cream in my coffee, I am helping to drain a marsh for cows to graze, and to exterminate the birds of Brazil. When I go birding or hunting in my Ford, I am devastating an oil field, and re-electing an imperialist to get me rubber. Nay more: when I father more than two children I am creating an insatiable need for more printing presses, more cows, more coffee, more oil, and more rubber, to supply which more birds, more trees, and more flowers will either be killed, or … evicted from their several environments (p. 165).

"What to do?" he asks, and offers two alternatives. There are "only two courses open. … to go live on locusts in the wilderness, [or] surreptitiously to set up within the economic Juggernaut certain new cogs and wheels whereby the residual love of nature … may be made to recreate at least a fraction of those values which their love of 'progress' is destroying" (pp. 165-66). The first alternative may fit well to the ones who go after their "personal wishes" about nature, like McCabe does. But under existing mode of production, most of us, who have to pursue a living in the jungle of cities, might choose to follow the second route. Although most of us sell out to the enemies of conservation, by our ways of life, we might still do something for the sake of nature. We might do something, at least, to awaken the love of nature which is dormant in "the enemies of conservation" or "progress lovers." As an "intergrade," Leopold suggests a middle way which tries to reconcile "realities of economics" and the need for protecting nature:

> I am conceited enough to believe that the formula my little group [of game management] is trying to put together comes as near meeting the *ugly realities of economics* on the one hand, and the *ideals of the protectionists* on the other, as yet any devised (p. 168, emphases added).

Leopold shows us that nonhuman constituents of nature deserve moral consideration. Harming nonhuman part of nature without a plausible reason is wrong as harming a human being is wrong. Furthermore, he shows that we are the only beings who are capable of considering the sake of nonhuman beings, not only that of ourselves or our close relatives. But he never seems to think that human beings and nonhuman members of nature are *equally* morally considerable. We have seen this, for instance, when he strongly argued for intensive management of nonhuman species (cf. 1946a, pp. 331-32; 1947b, pp. 341-42). He suggests culling of nonhuman species, when he thinks that this is necessary for the health of biotic community. He lets for extermination or radical distribution of nonhuman species when it is necessary to satisfy human interests (1939a, p. 255). Or he approves of amputation of marshes to make land habitable for human beings (pp. 258-59). But he is much more tolerant of his fellow species members. He

very well knows that humans far exceeded their carrying capacity, too. But he never suggests violent reduction or radical redistribution of human individuals, unlike he strongly does for nonhuman members of the land.

Could it be possible in the future that humanity mutually agrees on the rules of a nonanthropocentrist ethic as a universal norm to be applied in practice? This might be the ideal case for the health of the land. Metaphorically speaking this is something we can achieve, when majority of us learn "to think like a mountain" (Leopold, 1966, p. 140). But practically speaking, this seems nearly impossible for most of us, at least for the time being. We are living beings who have their own needs, desires, instincts, and who are limited with internal and external circumstances. But as the beings who are capable of inventing and developing morality, we can extend our scope of responsibility, as we have continuously done in the course of our evolutionary development. Leopold suggests the land ethic as the third step in the evolution of ethics. Will we come to accept all the constituents of nature in our scope of moral responsibility? For the time being, neither Leopold nor vast majority of human beings seem ready to attribute an egalitarian moral considerability to all members of nature. Perhaps circumstances and our moral development might bring most of us, in time, to accept that all the members of nature deserve equal respect and moral consideration. But for the time being and the near future we might think weak anthropocentrism as a viable alternative, as Leopold seems to do.

2.7. Does Leopold's Environmental Holism Imply "Ecofascism?"

Leopold's land ethic emphasizes the necessity of taking nature as a whole, implying that individualistic approaches, which try to save this or that species, or a particular ecosystem, only palliate but do not suffice to cure the problems of nature. Hence, it urges us to extend our limits of responsibility to the protection of whole nature together with its soils, waters, and biodiversity.

Nevertheless, the land ethic has been criticized especially about this very perspective of holism. It has been argued that holistic outlook makes the land ethic ignore individual rights. This, in the end, it is argued, leads us to a new sort of fascism, called ecofascism. For instance, as we have seen, Leopold's conception of land ethic allows for deliberate culling of some individual members of a species, if this is thought to be necessary for the sake of the whole natural habitat

where these individuals live. However, human species in general, and many human individuals in particular, too, have had substantial harmful impact on the stability, integrity, and beauty of the biotic community. For human beings have far exceeded their carrying capacity and their technological development has been mostly oblivious of the harm it made on nonhuman nature. On the other hand, according to the precepts of land ethic, human beings are theoretically on the same status with other members, i.e., they are plain members of the biotic community. So, does the land ethic allow to cull some human individuals for preserving the stability of nature (Regan, 1985, pp. 361-363; Callicott, 1989c, p. 92; 1999c, pp. 70-71)?

Instead of Leopold, Callicott has dealt with the ecofascism accusation against land ethic. Callicott argues that Leopold did not establish land ethic as a substitute for existing human ethics. Land ethic does not replace existing ethics, but it was thought as an accretion in the course of evolutionary development of ethics. According to Callicott, “biosocial development of morality does not grow in extent like an expanding balloon, leaving no trace of its previous boundaries” (1989c, p. 93). He prefers rings of tree analogy in order to explain Leopold’s depiction of evolution of ethics in stages. If the scope of ethics can be conceived like tree rings, the innermost ring depicts the boundaries of our responsibility for our family, and the outermost ring does those for the land. Thus, accepting the responsibility for the protection of whole nature does not mean the denial of our responsibility for our family or for our species members in general. In the case of conflict, we are allowed to realize first our duties which fall under the limits of an inner ring. “Family obligations in general come before nationalistic duties and humanitarian obligations in general come before environmental duties” (p. 94). Thus, we do not have to give up individual human rights for the sake of nature.

But to this depiction of Callicott, another criticism is in order. Preserving the privileged status of human beings in moral conflicts greatly reduces the force and claim of the land ethic. For it might result in the abandonment of acts which tend to preserve the integrity of nature for the sake of relatively small interests of human beings.

Hence land ethicists are faced with a quandary. Land ethic requires changing the role of humans from the master to the plain members of nature, and treating nature as a whole together with people, animals, plants, soils and waters collectively. So if it is right to limit the population of nonhuman species with coercive human intervention when it is thought to be necessary for the

sake of whole nature, then it is also right to do the same for humans whose activities have much more negative impact on nature than any other species members. On the other hand, if we cannot restrict human beings as we do nonhuman species members, land ethic is nothing but a paper tiger. For in many cases, the acts to preserve the integrity, stability, and beauty of nature might have to be precluded for the sake of human interests (cf. Crook, 2002, pp. 175-179).

To resolve this dilemma, that is, to preserve the force of land ethic without being ecofascistic, Callicott posited two priority principles. According to the first principle (SOP-1) "obligations generated by membership in more venerable and intimate communities take precedence over those generated in more recently emerged and impersonal communities" (Callicott, 1999c, p. 73). So, for example, if one has a limited income by which s/he can only meet the bare necessities of his/her family members, s/he is not expected to donate, say, Greenpeace. The second principle (SOP-2), on the other hand, aims at preserving the force of land ethic: "stronger interests (for lack of a better word) generate duties that take precedence over duties generated by weaker interests" (p. 73). Therefore, if one has sufficient resources, s/he is morally obliged to spend his/her effort and money for the good of the members of the larger communities, including biotic community, that s/he is also a part, rather than for luxurious demands of his/her family members, for instance.

Callicott believes that "ecofascism" is barred by SOP-1, and "paper tiger-ness" by SOP-2. But does SOP-1 not open the door wide for anthropocentrism? And is it not dubious to what extent SOP-2 could limit this? For it remains very subjective and obscure how a decision making procedure which is based on the strength of interests could make a human being act for the sake of nature. It is very likely that there will often emerge conflicts of interests which stem from being members of different communities, and that our duties to nature will often be precluded by our duties to "more venerable and intimate" communities. Indeed, Gary Varner provides an example to show that Callicott could not save the land ethic from being anthropocentric.

> Suppose that an environmentalist enamored with the Leopold land ethic is considering how to vote on a national referendum to preserve the spotted owl by restricting logging in Northwest forests. According to Callicott, he or she would be required to vote, not according to the land ethic, but according to whatever ethic governs closer ties to a human family and/or the larger human community. Therefore, if a relative is one of 10,000 loggers who will lose jobs if the referendum passes, the environmentalist is obligated to vote against it. Even if none of the loggers is a family member, the voter is

> more closely related to any of them than any spotted owl, and is still obligated to vote against the referendum (Varner, 1991, p. 176).

Varner's example makes us doubt that our duties to "more venerable and intimate" human communities might often, if not always, override our duties to biotic community, if the land ethic is a mere accretion to existing human ethics.

Callicott does not agree with Varner, though. In his opinion, Varner takes only SOP-1 into account, but not SOP-2. According to Callicott, if one compares the damage that will be done to the biotic community with the possible loss of the loggers, s/he can see that the former is incomparably larger than the latter.

> The spotted owl is threatened with preventable anthropogenic extinction … and the old-growth forest biotic communities of the Pacific Northwest are threatened with destruction. These threats are the environmental-ethical equivalent of genocide and holocaust. The loggers, on the other hand, are threatened with economic losses, for which they can be compensated dollar for dollar. … If we faced the choice of cutting down millions of four-hundred-year-old trees or cutting down thousands of forty-year-old loggers, our duties to the loggers would take precedence by SOP-1, nor would SOP-1 be countermanded by SOP-2. But that is not the choice we face. The choice is between cutting down four-hundred-year-old trees, rendering the spotted owl extinct, and destroying the old-growth forest biotic community, on the one hand, and displacing forest workers. … With SOP-2 supplementing SOP-1, the indication of the land ethic is crystal clear in the exemplary quandary posed by Varner, and it is opposite to the Varner, applying only SOP-1, claims it indicates (Callicott, 1999c, p. 75).

Let us examine Callicott's reasoning closely. As human beings we are members of various communities. If we consider community of mankind and of biotic community, our obligations to the former take precedence over those to the latter, according to SOP-1. But there is a limit to this principle. If a conflict of interests occurs, we are supposed to apply another priority principle. If the interest which makes us act for the mankind is smaller than the one which urges us to act for the biotic community, we are expected to realize our duty to the biotic community rather than the one to the mankind, according to SOP-2. For instance, saving a species from extinction has priority over the possible economic predicament of some humans that may emerge as a consequence of that saving. Humans' loss can be paid "dollar for dollar." But it is not possible to have a species back, once it has gone. So SOP-2 countermands SOP-1; we are obliged to save the old-growth forest which is the natural habitat of the species in question.

But does SOP-2, or “strength of interest” talk, really provide a firm and practical moral ground to motivate us to realize our duties to the biotic community when these duties conflict with our duties to “inner” communities, such as family, mankind, etc.?

According to Callicott, “[i]f we faced the choice of cutting down millions of four-hundred-year-old trees or cutting down thousands of forty-year-old loggers, our duties to the loggers would take precedence by SOP-1, nor would SOP-1 be countermanded by SOP-2” (1999c, p. 75). So, in his opinion, saving millions of old trees together with the species of spotted owl has a weaker interest than lives of thousands of human individuals. But why? What is the criterion behind this calculation? How would this calculation result if we had much lesser humans and much more trees and endangered species on the two sides of the equation of interests? For instance, could we sacrifice the Amazon Rainforest for the sake of a few hundreds of human beings, or vice versa? Or let us think that the old-growth forest and the endangered spotted owl were in an undeveloped country where the loss of loggers cannot be compensated. Could we still say that SOP-2 countermands SOP-1? Or inspired from Leopold’s “Thinking Like A Mountain,” let us try to think like nature (see Leopold, 1966, pp. 137-141). If nature had a chance to choose, what would she prefer: saving a species from extinction or saving some humans who make their lives by performing a “natural genocide?”

If we take Leopold’s motto in isolation and apply it conservatively, we might have to dispense with the interests of human beings in many cases. But we mostly cannot do this. As I indicated in the previous section, we cannot easily give up many human activities which favor needs and interests of our species even if we do know that they are on the disadvantage of nonhuman nature. Actually Leopold does not suggest this, either. Even Callicott concedes that “[g]uiding *all* our actions by the golden rule of the land ethic would indeed entail monstrous, homicidal consequences” (1999a, pp. 12-13, Callicott’s emphasis).[25] On the other hand, as we have seen above, Callicott’s suggestion of land ethic as an accretion to the old human ethics and delimiting land ethic with two priority principles do not seem to resolve the problem. A land ethic without being “ecofascistic” can either be an ethic without teeth or an ethic somewhat anthropocentric.

[25] Callicott also suggests “dynamizing” the moral maxim of the land ethic “in light of developments in ecology” (Callicott, 1999e, p. 138). He even offers the following revised form, though somewhat hesitantly, as the new moral maxim of the land ethic : *A thing is right when it tends to disturb the biotic community only at normal spatial and temporal scales. It is wrong when it tends otherwise* (p. 138, italicized in the original).

Indeed, Leopold was not a thorough nonanthropocentrist unlike Callicott likes to believe. Although Leopold does not like attributing a special value to human beings apart from nonhuman beings, he is always cautious to observe interests of human beings over nonhuman ones. Moreover, he keeps human beings immune from the severe land management policies that he strongly argued for nonhuman members of nature[26]. In addition, although he offers considering controlling human increase, he carefully demarcates himself from fascistic suggestions of Hitler and Mussolini on human population control.

> Self-limitation of population, like ethics, depends upon unanimity for its success. Hitler and Mussolini are advocating competitive multiplication, obviously with a view to bigger and better predations. That is to say, their remedy for the overpopulation of Europe is more overpopulation in Germany and Italy. Any child should comprehend the fallacy of such doctrine, which is utterly illogical without the corollary assumption that all cultural values repose in these expanding and predatory groups (Leopold, 1941a, p. 284).

Furthermore, Leopold does not aim at holism at the expense of individualism. For he praises individualism as it strengthens chances of survival of human species. Being inspired by Sewall Wright's[27] theory of plant and animal variants, Leopold argues that individualism may serve as "an evolutionary safety device" for human continuity.

> [Sewall Wright] postulates that survival of a species depends not on the small exigencies which beset it frequently, but on the catastrophes which occur at long intervals. No population ever survives a catastrophe, but only those individuals whose deviations from "normal" happen to enable them to. Since successive catastrophes are seldom twice alike, it follows that survival depends on the constant presence of individuals deviating from "normal" in many respects. Thus a population containing "individualists" in respect of cold, heat, drouth, starvation, predation, and disease may survive, whereas a similar population homogeneous in these respects may perish.
>
> I see in this an evolutionary mandate for individualism. Perhaps the deviations from physical and mental pattern which are tolerated in our social organization, but frowned upon or persecuted in more regimented societies, are an evolutionary "safety device" which may one day determine our continuity (pp. 285-86).

---

[26] But it should be pointed out in parenthesis that what Leopold suggests for nonhuman members can be qualified as a sort of oppression (speciesism, or anthropocentrism, at least), applied by humans on nonhuman members of the land. For he permits, or even urges, the intensive measures that would be applied to the nonhuman members of the land by humans for the sake of whole land.

[27] Sewall Wright (December 21, 1889 – March 3, 1988) was a well-known American geneticist and evolutionary biologist. He was the founder of theoretical population genetics together with Ronald Aylmer Fisher and John Burdon Sanderson Haldane ("Sewall Wright," 2011).

In addition, Leopold often refers to the concepts of "good life," "community welfare," and "human welfare," and relates the necessity of preserving nature with these concepts[28]. In his view, land is both a "food-factory" and *a means for* "self-expression" for human beings (1933b, p. 191). Thus, for Leopold, *summum bonum* is good life, and preserving the integrity, stability and beauty of the land is a necessary means to this ultimate end. It is not possible to attain good life in a nature which lost its integrity, stability and beauty. As he says "[s]table (i.e. healthy) land is *essential to human welfare*. Therefore it is unwise to discard any part of the land-mechanism which can be kept in existence by care and forethought" (1941c, p. 194, emphasis added).

Therefore, Leopold's land ethic is not ecofascistic. It would be proper to say that it is weak anthropocentric, the aim of which is to attain harmony, rather than opposition, between human beings and nature.[29] Perhaps it has to be so. Otherwise, it would hardly be possible to persuade most human beings to accept the norms of an ethic which bind only themselves and which strictly requires dispensing with their own interests in favor of preserving the integrity, stability and beauty of the whole biotic community.

But how is anthropocentrism, even if "weak," compatible with being a plain member of biotic community? How is it possible to preserve the integrity, stability and beauty of biotic community while observing interests of human beings? Being a plain member of nature has a symbolic significance. It reminds us of the fact that there are innumerably many other beings many of which are vital for our own existence and welfare. This is something only human species can be aware of. Human flourishing is not possible in a perverted nature devoid of integrity, stability and beauty. In this sense Leopold's motto, too, has symbolic value to underline the significance of nature for human beings. We need to preserve the health of the land, because this is a requisite for our own well being.

---

[28] Cf. 1933b, p. 188; 1940, pp. 276-280; 1944, p. 317; 1941c, p. 194; 1966, p. 163.

[29] Leopold often describes conservation as "harmony between men and land" (1939a, p. 255; 1966, pp. 189, 243). In 1939a, immediately after this description of conservation, he also adds that "[w]hen land does well for its owner, and the owner does well by his land; when both end up better by reason of their partnership, we have conservation. When one or the other grows poorer, we do not" (p. 255).

CHAPTER 3

VALUE OF NATURE AND CONSERVATION

Those who scan the literature on environmental ethics may see that the concept of value, or axiology, plays a fairly substantial role. The debate on the value of nature and of its components is still hot, and might not still in a short time. Aldo Leopold, too, often appeals to arguments which rest on the value of nature as a whole, or on the value of parts of nature.

As far as my humble study of Leopold's works is taken into account, Leopold does not mention the term intrinsic value of nature, or of its parts, neither in his earlier works nor in the later ones. However, Callicott believes that Leopold primarily had intrinsic value of nature and of its parts in mind. Callicott admits that Leopold did not state intrinsic value in his earlier works. But he insists that between the lines of these works one can find out Leopold's "unstated yet unmistakably present … conviction that wildlands have intrinsic value" (Callicott and Freyfogle, 1999a, p. 16).

On the other hand, Leopold might have had a conception of value which recalls or implies intrinsic value although he had not directly stated the name of the concept. However, I will argue in this chapter that Leopold's concern and emphasis on variety of instrumental values of nature which are subordinated to human welfare, in the final analysis, far outruns Callicott's overinterpretation that Leopold had an "unmistakable" conviction that nature had intrinsic value.

Nevertheless, although Callicott claims that Leopold "unmistakably" had the conception of intrinsic value even in his earlier works, he does not need to support his claim by sufficient textual evidence from Leopold's works. However, he refers twice to the same passage in the *Almanac*, the latest and posthumously published work of Leopold, in order to show that Leopold has a conception of intrinsic value:

> Leopold insists upon a noninstrumental value for the biotic community and *mutatis mutandis* for its constituents. According to Leopold, collective enlightened self-interest on the part of human beings does not go far enough; the land ethic in his opinion (and

> no doubt this reflects his own moral intuitions) requires “love, respect, and admiration for land, and a high regard for its value” (1989b, p. 26).

What Callicott refers to is from the following paragraph of Leopold from “The Land Ethic,” in the *Almanac*:

> It is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for land, and a high regard for its value. By value, I of course men [*sic*] something far broader than mere economic value; I mean value in the philosophical sense (Leopold, 1966, p. 261).

Callicott refers to the above paragraph, once more, in his 1989c, again in order to show that Leopold attributes intrinsic value to nature and its constituents. He claims that “[b]y ‘value in the philosophical sense,’ Leopold can only mean what philosophers more technically call ‘intrinsic value’ or ‘inherent worth’” (1989c, pp. 97-98).

In this chapter, I cast doubt on Callicott’s this contention about Leopold. As I will show in the subsequent pages, Leopold mostly appeals to instrumental values while trying to stimulate people to protect the land and to construct an ethical relation with it. He often justifies conservation policies on instrumental grounds.

Furthermore, a closer look at Leopold’s works will show that, in spite of some substantial breaks and some significant changes in his viewpoint, Leopold always wants to find a middle way between man’s insatiable desire to extract utility from natural resources, on the one hand, and to protect the health and beauty of the land, on the other. This approach is conspicuous in the following passage where he also states his most well-known words, the motto, or the moral maxim, of the land ethic, in the same section with the passage cited above:

> The ‘key-log’ which must be moved to release the evolutionary process for an ethic is simply this: quit thinking about decent land-use as solely an economic problem. Examine each question in terms of what is ethically and esthetically right, as well as what is economically expedient. A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise” (1966, p. 262, cf. 1947b, p. 345).

In other words, in Leopold’s view, we have the responsibility of preserving the integrity, stability, and beauty of the land, while obtaining economic gain out of it. That is to say, as human beings, we will continue to extract utility from the land, as we have done for centuries. But we are beginning to understand that “decent land-use” does not only mean exploiting the

economic value of the land. We are beginning to see that what nature provides us are not only economic values but also many others such as aesthetic, recreational, cultural, or scientific ones. We are beginning to see that we may not benefit other values that nature provides us, if we continue to see it as an economic resource which can be relentlessly exploited. Moreover, for Leopold, preserving "the integrity, stability, and beauty of the biotic community" is not the ultimate end rather it is a necessary means to "human welfare" or "good life."

In the following pages, I will try to show that Leopold tries to promote us, human beings, for conservation purposes by stressing on a wide variety of instrumental values of the land throughout his whole career. Although he criticizes the strong human centered approaches, he always tries to take care of human interests while defending and establishing his "land ethic." Furthermore, I will also question Callicott's own nonanthropocentric value theory which he thinks necessary for the establishment of an autonomous environmental ethic.

3.1. Values of Nature

There are many passages in Leopold's works, both in earlier and later ones, that he underlines various values of the land. As I stated above I could not find any instance in which Leopold uses the term intrinsic value. However, he frequently uses the term value, usually preceded by an adjective, such as recreational, aesthetic, economic, cultural, scientific, etc. Moreover, he often tries to justify conservation through instrumental reasons. In this section I will provide some of them.

3.1.1. Recreational Value of Nature

In one of his articles written as early as 1918, Leopold argues that foresters have the responsibility to take care of the *recreational value* of forests. In his opinion, it is foresters' duty to preserve not only utility but also the beauty of the land. Why is this duty of foresters? Because, "if they do not devise means of saving the game, the recreational value of the Forests will be permanently and seriously reduced" (Leopold, 1918b, p. 55). Furthermore, he explains why especially foresters are eligible for this duty:

> (1)Their work gives them the opportunity to be better acquainted with game conditions than any other class of men. (2) Their training in forestry especially fits them for the work. (3) They are the only large body of scientifically trained man on the ground. (pp. 55).

Thus, according to Leopold, once a human being had the sufficient knowledge and acquaintance, s/he had the responsibility to realize the needs of his/her knowledge. In other words, knowledge brings forth responsibility. And to motivate foresters to realize the knowledge they had, Leopold appeals to value, one which serves to the satisfaction of human beings, namely recreational value. Unless the foresters, who know how to preserve the recreational value of the forests, we are faced with the danger of permanent reduction of that value. So, in Leopold's view, not to reduce the recreational value of the forests is an important duty of the foresters; and to preserve the recreational value of forests is thought to have normative power, at least for foresters.

What Leopold means by recreational value of forests presumably is the joy humans get while they are amusing themselves in the forests, or in various areas of wilderness. While he is expressing his worries about decreasing number of patches of wilderness, due to industrial development, he states that

> these small patches have a high and increasing recreational value. … These patches are too small, and must grow smaller. They will always be big enough for camping but they will tend to grow too small for a real wilderness trip. The man who wants a wilderness trip wants not only scenery, hunting, fishing, isolation, etc. … but also the horses, packing, riding, daily movement, and variety found only in a trip through a big stretch of wild country (1921, p. 80).

For Leopold, hunting has always been an indispensable recreational activity. He has never seen a conflict between hunting as a recreational activity and the objectives of conservation. In his view, there is a hierarchy of values depending on the kind of the game to be hunted and the level of taste of the human beings who will hunt. In another article, "Game Methods: The American Way," he provides a "theorem" to describe that hierarchy of values, of the game:

> *The recreational value of a head of game is inverse to the artificiality of its origin, and hence in a broad way to the intensiveness of the system of game management which produced it* (Leopold, 1931, p. 158, italicized in the original).

This theme of inverse proportion between aesthetic value and artificiality repeats in other works, too, including his latest work, the *Almanac*. For instance in Leopold 1932b, he points out enthusiastically that "pheasant shooting is a good show, but quail and prairie chicken are grand

opera" (1932b, p. 169). And in Leopold 1934a, he says that "[w]e can … get heavier yields by artificial propagation, but … the esthetic quality of the product [would be] distinctly lower" (1934a, p. 195). In the *Almanac*, too, as we will see later in more detail, he argues that artificially grown game and fish by humans "lowers the unit value of trophy" (1966, p. 285).

Although Leopold admits his presumptuousness in calling above a theorem, it might give us some information about his axiological perspective. First, in Leopold's view, head of a game has some *recreational* or *aesthetic value*. Second, that value is relative to the origin of the game. For instance, if one hunts a game in an area where the conditions to hunt that game are harder – due to features peculiar to the conditions of the genuine species – aesthetic value of the head of that game is higher. Aesthetic value might decrease together with game management policies which favor artificial game plantation, artificial game cropping, etc.

Needless to say, what Leopold names as recreational or aesthetic value above is heavily instrumental to human interests and needs. Game animals are valuable, because hunters satisfy some of their needs while pursuing and killing them. Furthermore, recreational or aesthetic value, which is obtained through killing these animals, is also relativized depending on the conception and the taste of some human beings.

3.1.2. Scientific Value of Nature

Leopold wants to protect some remnants of wilderness for also scientific purposes. He brings forward the significance of wilderness as a laboratory to be worked to find out the features of a healthy or stable land. In other words, wilderness has also *scientific value*. In order to detect the causes of the sickness of the land we need at least a patch of land which does not suffer from instability. There are two candidates of Leopold for this purpose. One is the "northeastern Europe" which stands without losing its stability despite the centuries of human intervention. The other one is wilderness areas where human intervention has not led to instability yet (Leopold, 1941b, p. 288).

> All wilderness areas … have *a large value to land-science*. The important thing is to realize that *recreation* is *not their only or even their principal utility*. In fact, the boundary between recreation and science, like the boundaries between park and forest, animal and plant, tame and wild, exists only in the imperfection of the human mind (Leopold, 1941b, p. 289, emphases added, cf. 1966, p. 276, first two sentences are almost verbatim).

We should notice that Leopold puts both the recreational and scientific value of wilderness as *utility*.

3.1.3. Value of Biodiversity

As every ecologist and environmental philosopher, Leopold, too, values biodiversity. In his view, “[v]ariety in game is quite as valuable as quantity.” Because,

> [W]e want not only raise a maximum number of mule deer and turkey, but we must also at least perpetuate the Mexican mountain-sheep, big-horn, antelope, white-tail deer, Sonora deer, elk and javelina. The attractiveness, and hence the value of our Forests as hunting grounds, is easily doubled by retaining our extraordinary variety of native big game. This variety also adds enormously to their attractiveness for the summer camper, the cottager, and the fisherman. The perpetuation of interesting species is good business, and their extermination, in the mind of conservationists, would be a sin against future generations (Leopold, 1918b, p. 59).

Therefore, in Leopold’s view, biodiversity should be protected for it satisfies some aesthetic human interests. Not to protect interesting species will deprive posterity of the satisfaction of those interests. Extermination of “interesting” species is a sin, not for the sake of the species in question, but for some future human beings may not benefit from the aesthetic or recreational value of these “interesting species.” In short, what Leopold means by the value of the forests is not intrinsic value which is an end in itself, but rather instrumental value which serves to the satisfaction of present summer camper, the cottager, or the fisherman, or at most of future generations.

3.1.4. Economic and Capital Value of Nature

In Leopold’s view, economic value of nature, or of the land, might be classified into three. First, there are components of nature which have inherent economic importance. Among them he counts soil, forests, water, and game. Secondly, there are components which might have indirect economic importance. Leopold cites wildflowers, songbirds, scenery, wilderness areas under this category. And finally, there are components which have economic importance for the community, but which might provide dubious profit for the individual land owner. “Most marshes, most cover on stream banks and steep slopes, most windbreaks” are among this kind (Leopold, 1944, pp. 316-17). Thus, according to Leopold, almost every

component of the land might be evaluated according to its contribution to the economy of the human community.

Leopold also mentions *capital value* of natural entities. Needless to say, this is another form of instrumental value.

> Foresters are quite properly concerned over the threatened commercial extermination of chestnut by blight and white pine by the blister rust. But how much concern is felt over the impending extermination of mountain-sheep and antelope on the National Forests? I am afraid, very little. Yet a good stock of mountain-sheep alone add millions of dollars to the capital value of National Forests resources. Men go to Tibet to hunt the argali. Surely they would come to New Mexico to hunt *Ovis mexicanus* – if we had any left to hunt (1918b, p. 59)

So, according to Leopold, foresters should pay close attention to the survival of various game at least as much as they do for the health of the trees. Why? Not for that they do have intrinsic value, but for their potential capital value which they will add to that of National Forests resources.

3.1.5. Value of Nature as Resource

In “Wilderness as a Form of Land Use” Leopold manifestly states that “wilderness is a resource” (1925c, p. 135). First of all, it is a resource in the sense that it provides various raw materials for us to use it to satisfy various human needs through industrial or other mechanisms. As he states in Leopold 1923, the land provides us many kinds of resources. We can extract various minerals from the land. Or we may benefit from forest resources, “waters, and water powers,” or we may establish farms, all of which Leopold calls “organic” resources (1923, p. 86). In addition, the land may provide us various “climatic,” “historic,” and “geographic” resources (p. 86). Furthermore, nature is a resource, which provides us “certain *social values*,” such as recreation, hunting, trekking, picnicking, etc. (Leopold, 1925c, p. 135, emphasis added). Thus, in Leopold’s view nature is a resource to be used to satisfy various industrial, agricultural, or social needs of human beings.

This emphasis on nature’s being resource appears as a constant theme not only in Leopold’s earlier works, but also in his later works. In “Conservation Economics,” for instance, Leopold argues that trying to protect “the permanence of the resources whence comes our bread and butter” and our “personal contact with natural beauty” are equally valuable efforts (1934a, p.

193). Moreover, he points out that conservation aims at minimizing further losses in these "two things of possibly equal value" (p. 193). Hence nature is valuable for it satisfies our primary and recreational, or aesthetic needs. Furthermore, he tries to justify conservation by relying on protection of these instrumental values: "[c]onservation is the effort to so use the whip that these two losses will be minimized" (p. 193).

In "The Farmer as a Conservationist," Leopold relates conservation with nature's value as a resource, once more. He describes conservation as "keeping the resource in working order as well as preventing over-use" (1939a, p. 257). Furthermore, he adds that "[r]esources may get out of order before they are exhausted, sometimes while they are still abundant" (p. 257). Thus he again points out that nature is a resource, but this time with a warning. We should use our resources with care. We should not overexploit nature. We should not err by looking only at production rates or present abundance of the resources. We should take into account permanence of our resources, as well. For, as he says, "[h]ealthy land is the only permanently profitable land" (1946b, 224).

Leopold frequently underlines nature's assets for humans, and justifies necessity of conservation and ecology on the ground of maintaining nature's capacity to provide resources permanently. For instance, in another work, he states that "[c]onservation means land-health as well as resource-supply" (1944, p. 318). If we consider this together with what he said in 1939a and 1946b given above, we realize that land-health is required for permanence of resource supply. His description of ecology, too, is strongly related with the concept of resource. Leopold defines ecology as "the attempt to understand what makes resources stable or unstable (1941a, p. 282).

3.1.6. Scarcity Value and/or Aesthetic or Artistic Value of Nature

Leopold considers that it is more probable to evolve ways to preserve a species if it has *economic* or *scientific value*. But conservationists must find ways to save all threatened species even if they do not have such immediate and easily seen use values.

> Most species of shootable non-migratory game have at least a fighting chance of being saved through the process of purposeful manipulation of laws and environment called management. … It is an ecological probability that we will evolve ways to do so.
>
> The same cannot be said, however, of those species of wilderness game which do not adapt themselves to economic land-use, or of migratory birds which are owned in

> common, or of non-game forms classed as predators, … or in general of all wild native forms which fly at large or have only an *esthetic and scientific value to man*. … Like game, these forms depend for their perpetuation on protection and a favorable environment. They need "management" – the perpetuation of good habitat – just as game does, but the ordinary motives for providing it are lacking. They are the threatened element in outdoor America – the crux of conservation policy. The new organizations which have now assumed the name "wildlife" instead of "game," and which aspire to implement the wildlife movement, are I think obligated to focus a substantial part of their effort on these threatened forms (Leopold, 1936a, pp. 231-32, emphasis added).

Therefore, we can be hopeful about protection of the non-migratory game. The evidence shows that we will develop ways to preserve them; this is "an ecological probability" (p. 231). However, we should also develop ways to preserve other threatened species including predators as well. "[B]ut the ordinary motives for providing" wildlife management are lacking (p. 231). For not all species have visible *economic* or *scientific value*. How to solve this problem? What could be the motivation for us to save endangered species which do not have economic or scientific value? Leopold seems to find a way out through another form of value, namely *aesthetic* or *artistic value*:

> We are peculiar … in that our tools are scientific whereas our output is weighed in esthetic satisfaction, rather than in economic pounds or dollars. An echelon of white geese is economic only in the sense that an actress is. Both have physical substance, and people will pay to see or hear them. But the measure of their worth is wholly qualitative and inheres in "personality." Strangely enough, though, our senses do not differentiate individual personality in animals. Our perceptions of character are of the species. In edible game there is an incidental meat value, but its triviality is conveyed by the reflection that a single inedible Carolina Parakeet today may be worth more than a million edible pheasants.
>
> [T]he value of wild things is in part a *scarcity value*, *like that of gold*. It is also in part an *artistic value*, *like that of a painting*. The final arbiter of both is that elusive entity known as "good taste." There is, though, this residual difference: a painting might conceivably be re-created, but an extinct species never (Leopold 1936b, p. 236, emphases added).

So, the motivation to preserve a species, which does not seem to have immediate or visible use value, could be aesthetic value. Value of an extinct species is immeasurable. Because we are not able to create it again. That is why Carolina Parakeet is invaluable as compared to a million edible species and to any work of art. That is why we cannot let species go extinct. However, both scarcity value and artistic value rest, in the end, on "good taste." Good taste of whom? No doubt, of human beings. Furthermore, value of an extinct species stems from its non-re-creatable

artistic or aesthetic value. Thus Carolina Parakeet is invaluable, because its non-presence affects or harms the taste of some human beings who might have some special sense of aesthetic value.

3.1.7. Cultural Value of Nature

In order to move Americans for conservation, Leopold frequently uses rhetoric and tries to appeal to some *cultural values* of American people. Leopold argues that Americans have a desire to flee into wild life. And this desire stems from an instinct peculiar to Americans. This is the instinct of becoming a "pioneer:"

> We do not realize how many Americans have an instinctive craving for the wilderness life, or how *valuable* to the nation has been their opportunity of exercising that instinct, because up to this time the opportunity has been automatically supplied (Leopold, 1925a, p. 129, emphasis added).

So, according to Leopold, some wilderness areas should be protected, at least to let live some cultural values of Americans. Or if we try to look at from another angle, he addresses cultural values in order to promote protection of wilderness.

Until very recently, most of us were not aware of the significance of wilderness in our lives. According to Leopold, this is because, till this time, we did not have any serious problems related with what nature in general, and wilderness in particular, provides us.

In other words, there did not arise a supply problem related with natural resources. They seemed illimitable and inexhaustible to us.

> The accessible supply has heretofore been unlimited, like the supply of air-power, or tide-power, or sunsets, and we do not recognize anything as a resource until the demand becomes commensurable with the supply. … [A]fter three centuries of overabundance, and before we have even realized that we are dealing with a non-reproducible resource, we have come to the end of our pioneer environment and are about to push its remnants into the Pacific (Leopold, 1925c, p. 137).

Therefore, in Leopold's view, if we try to conceive our environmental condition in a supply-demand chart we might see our position more clearly. What we will see, actually, is similar to the position of the potato bug which "exterminates the potato and thereby exterminates itself" (p. 137, also cf. 1923, p. 97, and 1924c, p. 127). However, Leopold is never pessimistic. It is still possible, he believes, to achieve a balanced land system, before we lose the last patches of

wilderness. But we should be aware of the fact that once we have lost the last remnants of wilderness, it is impossible to reproduce it and to benefit the social utilities it provides.

Leopold emphasizes cultural value of wildlife in somewhat more detail in the *Almanac*, as well. For instance in "Wildlife in American Culture," he cites three kinds of cultural values that one can get during his/her experience with wildlife.

> First there is *value* in any *experience that reminds us of our distinctive national origins and evolution*, i.e. that stimulates awareness of history. …
>
> Second, there is *value* in any *experience that reminds us of our dependency on the soil-plant-animal-man food chain, and of the fundamental organization of the biota*. …
>
> Third, there is *value* in any *experience that exercises those ethical restraints collectively called 'sportsmanship'* (1966, pp. 211-12, emphases added).

Leopold calls the first one, "[f]or lack of any other short name," "the split-rail value" (p. 211). We should be aware of the fact that what Leopold finds most valuable in cultural aspects of wildlife is the experience of human beings with it. These experiences might remind us of our historical, or evolutionary origins; or of our being dependent on nature as a part of it; or of our ethical universe, or conscience while utilizing nature as a resource to satisfy our own needs.

Furthermore, as it was stated above, for Leopold, hunting is a permissible activity, not only for non-human predators, but also for human beings as well. Although he has tempered his views about predator control as opposed to his passionate game managerial period, he himself always enjoyed hunting and suggested it as an activity which has recreational value, and which triggers "pionerhood" in Americans. However, he complains about using some new elaborate technological gadgets which destroy both the cultural value and the "*contrast-value*" of hunting (p. 216, emphasis added).[30] Moreover, hunters should obey some ethical codes while hunting. As

---

[30] Leopold expresses his complaint about new forms of hunting as follows:

> [T]here must be some limit beyond which money-bought aids to sport destroy the cultural value of sport. …
>
> I have the impression that the American sportsman is puzzled; he doesn't understand what is happening to him. Bigger and better gadgets are good for industry, so why not for outdoor recreation? It has not dawned on him that outdoor recreations are essentially primitive, atavistic; that their value is a contrast-value; that excessive mechanization destroys contrasts by moving the factory to the woods or to the marsh (1966, p. 216).

Leopold says, if a hunter betrays ethical codes during hunting, this "degenerates and depraves him" (p. 212). For instance, Leopold observes that some hunters hunt illegally, and leave the carcasses of animals in the forest, "where they fall" (p. 213). In Leopold's view, such hunting "is not only without social value, but constitutes actual training for ethical depravity elsewhere. … [S]plit-rail and man-earth experiences have *zero or plus values* [first and second values cited above], but … ethical experiences may have *minus values* as well" (p. 213, emphases added). Leopold probably means the following: One may or may not enjoy the beauties of wildlife when s/he is in touch with it. If s/he enjoys s/he gets positive value from this experience. If s/he does not then s/he gets no value. On the other hand, if s/he is loyal to ethical codes during his/her experience with nature s/he also gets some ethical value: "voluntary adherence to an ethical code elevates the self-respect of the sportsman" (p. 212). However, if s/he betrays some ethical codes during his/her experience with nature, then this experience may subtract some value from himself/herself. For "voluntary disregard of the code degenerates and depraves him" (p. 212).

3.1.8. Replacement Value of Nature

While expressing his opinions about experience of hunting in particular, and of wildlife in general, Leopold mentions presumably recently emerged economic term of his time, like scarcity value cited above in section 3.1.6, namely *replacement value*[31], in order to emphasize value of nature and of its components. Leopold first reminds the value of wildlife in terms of its various social aspects.

> [W]e have not yet learned to express the value of wildlife in terms of social welfare. Some have attempted to justify wildlife conservation in terms of meat, others in terms of personal pleasure, others in terms of cash, still others in the interest of science, education, agriculture, art, public health, and even military preparedness. But few have so far clearly realized and expressed the whole truth, namely, that all these things are but factors in a broad social value, and that wildlife, like golf, is a social asset (1966, pp. 226-27).

Thus, one can justify wildlife conservation on a variety of grounds. It significantly contributes to "social welfare," and provides us many kinds of social values. As we have seen above, it

[31] Replacement value or replacement cost is a term emerged in mid-20th century. It "refers to the amount that an entity would have to pay to replace an asset at the present time, according to its current worth" ("Replacement Value," 2011). It is still extensively used in the vocabulary of insurance industry to state the value of an insured item. The amount will be paid by the insurance company (replacement value) is calculated depending on the condition of the lost or damaged asset ("Replacement Value," 2011).

provides us many resources to satisfy our various needs, or personal pleasure, or recreational value. Or it inspires scientists and artists to create theories or works of art. In other words, it has also scientific and artistic value.

These are all good, but it is not the whole story about the value of wildlife. What might Leopold mean by "the whole truth," or "by broad social value," or expression of "the whole truth" in terms of being "a social asset" "like golf?" Presumably, he might want to draw attention to values of wildlife which seem to be forgotten. He reminds that hunting and fishing are "the oldest and most universal of all sports" as compared to golf which was a "diversion for the idle rich" some years ago (p. 226). But, as he points out in the subsequent lines, wildlife is more than that, i.e., it is more than the various social values attached to it, especially for those who have the chance to experience it deeply enough.

> But to those whose hearts are stirred by the sound of whistling wings and quacking mallards, wildlife is something even more than this. It is not merely an acquired taste; the instinct that finds delight in the sight and pursuit of game is bred into the very fiber of the race (p. 227).

Thus wildlife is not only something which has various kinds of social values, or something which gives us pleasure through "the sight and pursuit" of various game or landscape. But, more than this, Leopold asserts, the pleasure we get from the experience in nature is due to the instinct which is bred into human nature. Of course, this is a very powerful conjecture by Leopold which needs justification.[32] Needless to say, if we had an instinct which needs to be satisfied by "the sight and pursuit of game," and if we could justify its existence, this discovery would greatly contribute to the normative power of conservation.

Could this approach, by Leopold, attest that he has conception of intrinsic value in mind, or that he attributes intrinsic value to nature and its members, like Callicott contends? Presumably, it does not. Even if we had such an instinct, and if we could satisfy that instinct through participating in the activities of hunting or fishing, these would not suffice to show that the game or fish we went after had intrinsic value. Satisfying that instinct through "the sight and pursuit of

---

[32] Leopold does not attempt to justify this conjecture, but gives some other assertions and sentimental opinions. For instance, he says that "[g]olf is sophisticated exercise, but the love of hunting is almost a physiological characteristic," or that "[b]abes do not tremble when they are shown a golf ball, but I should not like to own the boy whose hair does not lift his hat when he sees his first deer" (1966, p. 227).

game" by hunting or fishing should not be much different than satisfying our other instincts. We may satisfy hunger by eating food or thirst by drinking water. As food and water have value as a means to satisfy our instincts, "the sight and pursuit of game," too, have value as a means to satisfy that special instinct Leopold mentions. To say that Leopold implies that "the sight and pursuit of game," or nature, or animals and plants in nature, have intrinsic value, springing from the instinct he suggests, would be too much, or another speculation, at best.

Nevertheless, Leopold does not only claim that the striving for the experience in wildlife stems from an instinct of humans which is bred into their nature, but also argues that it would be violation of an inalienable right, if the appropriate conditions for the satisfaction of that instinct lack:

> Opportunity for exercise of all the normal instincts has come to be regarded more and more as an inalienable right. The men who are destroying our wildlife are alienating one of these rights, and doing a thorough job of it. More than that, they are doing a permanent job of it. When the last corner lot is covered with tenements we can still make a playground by tearing them down, but when the last antelope goes by the board, not all the playground associations in Christendom can do aught to replace the loss (p. 227).

Why and how do humans who destroy wildlife violate an inalienable right? For freedom of exercise of instincts is an inalienable right. Some other humans, by destroying wildlife, alienate this human right. Because when they destroy wildlife, or a member of it, thoroughly and permanently, its loss cannot be replaced with any other thing.

Thus Leopold attributes a new and peculiar characteristic, or another value, namely *replacement value* as opposed to its exchange value, to wildlife. It is possible to remake, or rebuild, or replace the human artifacts, even the most precious works of art. But no one can remake, repair, or replace something, which is done by the hand of God, if it goes extinct:

> I have seen a thousand geese this fall. … I am sure those thousand geese are paying human dividends on a dollar value. Worth in dollars is only an exchange value, like the sail value of a painting or the copyright of a poem. What about the replacement value? Supposing there were no longer any painting, or poetry, or goose music? It is a black thought to dwell upon, but it must be answered. In dire necessity somebody might write another Iliad, or paint an 'Angelus,' but fashion a goose? 'I, the Lord, will answer them. The hand of the Lord hath done this, and the Holy One of Israel created it.' … If … we can live without goose music, we may as well do away with stars, or sunsets, or Iliads. But the point is that we would be fools to do away with any of them (pp. 229-230).

What Leopold says above is in parallel what he said earlier (1936b, p. 236) that I cited in section 3.1.6 above. Hence we should protect nature and its parts, and not let species go extinct, because once they have gone, they cannot be re-created. Furthermore, in Leopold's eyes, experiencing goose music is as significant as experiencing sight of stars, or sunsets, or enjoying Iliads. They are equally indispensable for him, and hopefully for all human beings. Or with a broader interpretation, extinction of a species, or being deprived from the experience of a natural being is no less important than doing away with a precious work of art, or the experience of sunset or stars.

Moreover, Leopold once more relates the necessity of conservation with the interests of humans and the concern for posterity. Those humans who destroy wildlife thoroughly and permanently do not only violate an inalienable right of present humans but also deprive future humans of experiencing the values of wildlife:

> There are yet many boys to be born who, like Isaiah, may see, and know, and consider, and understand together, that the hand of the Lord hath done this. But where shall they see, and know, and consider? In museums? (Leopold, 1966, pp. 231-32).

Leaving aside Leopold's speculation about the human instinct to be satisfied through the sight and pursuit of wildlife, can we infer from what Leopold said above that he unmistakably had a conception of intrinsic value, like Callicott claims? I believe that we cannot. First of all, what Leopold says, to show the value of wildlife, is totally human oriented. As we have seen above, humans who destroy wildlife thoroughly and permanently, violate the rights of present or future humans. So we should protect wildlife and nonhuman beings in it, because if we do not protect them, many present and future human beings would be deprived of satisfaction or having delight through the experience of nature and various nonhuman members in it. Furthermore, we cannot take replacement value as intrinsic value, either. For it just serves to emphasize value of nature and the beings in it for the better satisfaction of human beings. What Leopold says simply is the following: Do not destroy nature. Or positively, protect nature and its constituents. For, you cannot replace them, once you have lost them permanently.

3.2. "Conservation Esthetic"

Leopold devoted a section to explain his conception of aesthetics of nature and conservation in the *Almanac*. "Conservation Esthetic" is the last section in the book. I decided to analyze that

section separately. For it clearly reveals Leopold's mature thoughts about the beauty of nature. It is clearly seen that Leopold's conception of nature aesthetics are instrumental to human goodness. Indeed, this is nothing surprising or disappointing. As a man of practical wisdom, he understood conservation as establishing "a *universal symbiosis with land*, esthetic and economic" (1933b, p. 188, Leopold's emphasis), or harmony between "the utility and beauty of the landscape" (1935a, p. 212), or between "men and land" (1939a, p. 255; 1966, pp. 189 and 243). As he points out forcefully, we have to see that land is "a community to which we belong" and "begin to use it with love and respect," otherwise the land can no more "survive the impact of mechanized man" and we can no more "reap from it the esthetic harvest it is capable, under science, of contributing to culture" (1966, pp. xviii-xix).

In "Conservation Esthetic" Leopold provides a list of "esthetic harvest" that we can reap from the land. What Leopold means by the aesthetics of nature, or by the "conservation esthetic," is quite plain. He lists various satisfactions that individual human beings get while they are interacting with nature through diverse ways, such as hunting, fishing, trekking, picnicking, wildlife research, husbandry, etc. Leopold frequently emphasizes the significance of recreational value of wild life for human beings. According to Leopold, our satisfaction from wild life is relative to various things, such as our good taste, education, profession, culture, experience of nature, etc.

Although Leopold defends the necessity of human's closer contact with nature, he is not at ease with every form of human interaction with nature. In his view, the new trend of "love" of nature, by which he means occupation of wilderness areas by motorized tourists and taking outdoor recreation as an economic resource only, leads to destruction of wilderness areas little by little through building roads, or artificial game and fish cropping, or some other means which degrade the wildlife. Furthermore, this form of "love" of nature results in narrowing and dilution of the value of recreation, or the aesthetic value of nature, for him and some other minority who wants to enjoy wildlife in its solitude and in its perfect wildness.

As he plainly states, "[w]e seek contacts with nature because we derive pleasure from them" (1966, p. 283). Furthermore, he thinks that hunting in nature is as aesthetic a performance as singing an aria in the opera. In his view, "[t]he duck-hunter in his blind and the operatic singer on the stage, despite the disparity of their accoutrements, are doing the same thing. Each is

reviving, in play, a drama formerly inherent in daily life. Both are, in the last analysis, esthetic exercises" (p. 283).

Many people may not agree with Leopold for his analogy between performance of hunting and aria, and seeing both as "aesthetic exercises." To these people I need to say on behalf of Leopold that he has a very broader perspective about hunting. He considers hunting as a multifaceted human affair. In his view, for instance, taking pictures or making wildlife research, too, can be seen as a form of hunting. He is not against bloody hunting, though. But more important than these, two points in what Leopold says above is worth underlining. First, Leopold suggests pleasure as an unqualified reason for our need of touch with nature. Secondly, on the other hand, since he is unhappy with humans' present swarming of nature in an irresponsibly destructive manner, he needs to appeal to aesthetics and wants to contribute to increase the level of good taste of humans in their relations with nature.

Leopold analyzes aesthetics of nature in five components.

3.2.1. Trophy-Value

One of the aesthetic components of nature is trophy. Nature lover might want to have some concrete object, a memento, serving as a certificate which confirms his/her experience with nature. For instance, some fish caught, a head of a stag with beautiful antlers, or a specimen of a wildflower, or just a photograph of an outstanding natural entity might very well serve for this purpose.

> All these things rest upon the idea of *trophy*. The pleasure they give is, or should be, in the seeking as well as in the getting. The trophy, whether it be a bird's egg, a mass of trout, a basket of mushrooms, the photograph of a bear, the pressed specimen of a wild flower, or a note tucked into the cairn on a mountain peak, is a *certificate*. It attests that its owner has been somewhere and done something – that he has exercised skill, persistence, or discrimination in the age-old feat of overcoming, outwitting, or reducing-to-possession. These connotations which attach to the trophy usually far exceed its physical value (p. 284, Leopold's emphases).

We should not miss the instrumental justification of aesthetics and human-centeredness here. First of all, nature lover is a human being. S/he needs to certify his/her experience in nature with some concrete entity. S/he gets pleasure in his/her experience in nature, either while seeking or getting the means which will serve as the certificate. Finally, this certificate does not only

confirm his/her experience in nature, but also attests his/her “skill, persistence, or discrimination … of overcoming, outwitting, or reducing-to-possession” (p. 284). All these are values that nature lover, a human being, attributes to the trophy. And all these values are human values, i.e., values, as far as we know, only human beings attribute to nature and its constituents. And all these values, in the end, are subordinate to human satisfactions, such as deriving pleasure, confirmation of his/her capacities, etc.

However, as the new trend of nature “loving” spreads, economic minded people seek to do something to meet the demands of nature lovers. Hence professional wildlife managers want “to give each hunter more, or to give more hunters the same amount” (p. 285). In other words, in the case that the amount of game or fish in nature is under the demand, the exceeding demand is tried to be satisfied by artificial game or fish cropping. But in Leopold’s view, this process of artificial intervention “lowers the unit value of trophy” (p. 285).

For example, let us think of trout artificially raised in a river. “No one would claim,” says Leopold, “that this trout has the same value as a wholly wild one caught out of some unmanaged stream in the high Rockies. Its esthetic connotations are inferior, even though its capture may require skill” (p. 285). This theme of decrease in value due to artificial human intervention is a constant theme in Leopold’s works which goes back early 1930s (cf. 1931, p. 158, and 1932b, p. 169). Furthermore, in another work written in 1932, he describes game management as “the art of producing crops of *wild* animals for recreational use” (1932c, p. 28, Leopold’s emphasis). Thus, we can say, for Leopold, that game management should aim at promoting production of wild animals rather than producing aesthetically inferior artificial animals.

But we should not overlook the recreational aspect of game management in either ways. Both ways, that is production of game animals either naturally or artificially, aim at satisfying recreational needs of human beings. Both kinds of game management, in the final analysis, serve as a means to satisfy human needs.

On the other hand, Leopold does not approve of economic minded wildlife managers’ cropping fish or game artificially. This act of wildlife managers might be seen either anthropocentric or nonanthropocentric. It might be seen as anthropocentric, because wildlife managers want to meet the demands of human beings who want to hunt or kill nonhuman animals. But it might also be

seen as nonanthropocentric an attitude, because, by artificial game and fish cropping, wildlife managers decrease the possibility of killing of non-artificially grown wild animals. Furthermore, by diluting the aesthetic value of game, they act against the interests of some human beings who have a higher aesthetic taste of hunting, for instance like Leopold has.

What about the attitude of Leopold? Leopold, too, by promoting management and hunting of naturally grown game animals, wants to meet the demands of some human beings who have somewhat higher aesthetic view. But this, alone, does not suffice to make him anthropocentrist, one may say. Because hunting is a natural activity that many species perform as well as humans. So we should not call Leopold anthropocentrist for he promotes a natural activity. Due to the same reason we should also vindicate wildlife managers who want to provide sufficient amount of game population for human hunters. But, as we have seen above, for Leopold hunting is not just a natural activity for humans. It is also a cultural and aesthetic performance. That is to say hunting, for humans, especially for city dwellers, is not an activity to satisfy their hunger, but more than that it is an activity by means of which they have some aesthetic satisfaction and pleasure. A city dweller can satisfy his/her need of meat through various means without bothering himself/herself about many “uncomfortable” requirements of hunting. Indeed, s/he usually satisfies his/her needs of food by simply buying from a suitable place in the city. Thus, by hunting, his/her first and foremost goal is not to satisfy his/her need of food, unlike most of the nonhuman species do. And it is this very cultural and aesthetic aspect of hunting that Leopold values most. Hunting, for Leopold, primarily is a way of getting aesthetic pleasure. And he sincerely tries to remind his fellow citizens to experience that special pleasure that they seem to forget to have since the “pioneering times.”

Nevertheless, having the aesthetic satisfactions of pioneering times might not be so easy. A lot of things have changed since the “covered wagon” days. Especially due to the industrial progress, most of the wilderness areas, which are the natural habitat of many game animals, have been destroyed. Thus game animals are no more abundant unlike they were in pioneer days. On the other hand, human population has continuously increased since then. Then how to solve this supply-demand problem? Leopold points out that “as mass-use increases it tends to push the whole gamut of conservation techniques toward the artificial end” (1966, p. 285). In other words, for human beings who still want to have the aesthetic satisfaction of pioneering times or covered wagon days, some new “conservation techniques” need to be implemented. But these

new techniques inevitably bring about some problems. To meet the demands of *human* hunters only, some “smart” men invented artificial game and fish cropping. This invention, according to Leopold, leads to an aesthetic problem, as we have seen above. In other words, “trophy-value” of an artificial game is inferior with respect to the “trophy-value” of a naturally grown game. In fact, Leopold believes that, by means of artificialization, not only trophy-value of game animals but “the whole scale of trophy-values [would go] downward” (p. 285). Leopold suggests the case of artificially grown trout in hatcheries as an example:

> To safeguard this expensive, artificial, and more or less helpless trout, the Conservation Commission feels impelled to kill all herons and terns visiting the hatchery were it was raised, and all mergansers and otters inhabiting the stream in which it is released. … Artificialized management has, in effect, bought fishing at the expense of another and perhaps higher recreation; it has paid dividends to one citizen out of capital stock belonging to all (pp. 285-86).

Could Leopold have meant whole wildlife preserved for the sake of itself rather than for the sake of human interests? When one begins to crop fish, this brings about some inevitable outcomes. In order to protect the fish produced, one needs to fight against their predators. Thus artificial fish cropping might have detrimental effects on nature more than anticipated. This is very similar to clearing a wild area for industrial farming, usually to produce a single resource. Leopold argues both against artificial game and fish cropping as we have seen above, and industrial farming or agriculture which promotes production of a single species at the expense of many others.[33] Nevertheless, second sentence quoted in above paragraph clearly shows that Leopold has human interests more than nature and its nonhuman constituents themselves in mind. To those who think that they have made a good job by “artificialized management” he argues that what they do, in fact, is not economic. He argues that artificially produced trout is, actually, expensive, if we take into account interests of all citizens rather than only the interests of citizens who produce some artificial trout. But how does artificialized management pay “dividends to one citizen out of capital stock belonging to all” (p. 286)? Or how are the interests of majority of citizens harmed by artificial fish cropping? To answer this question Leopold resorts to recreational or aesthetic value, again. Firstly, in his view, trophy-value of the artificially produced trout is lower than that of naturally grown one. Secondly, artificial production indirectly harms some other wild beings which prey on trout. We should notice that

---

[33] cf. 1939b, pp. 269, and 272; 1943, pp. 306-309; 1966, pp. 199-200, and 254-55.

Leopold points out recreational or aesthetic value of these wild beings for humans rather than their intrinsic value. If we approve of artificialized management, this time of trout, we will be giving consent to significantly decrease recreational value of nature in a chainlike fashion. Because, firstly, we will have to be contented with obtaining trophies which are aesthetically inferior. Furthermore, we will be decreasing the possibility of seeing some wild creatures which prey on trout, since they are killed to protect artificially produced "helpless" and aesthetically inferior trout.

3.2.2. Scarcity Value of Nature

In Leopold's view, together with the trend of "love" of nature among city dwellers, and thus with the rush of motorized tourists into wild nature, feeling of isolation in nature has begun to have a scarcity value. For "[t]he jeep and the airplane, creatures of the ever mounting pressure from humanity … eliminate the opportunity for isolation in nature" (Leopold, 1966, p. 289). As more people demand to enjoy goodness of wildlife, economic concerns are beginning to prevail. Some "smart" people begin to think that to make feel comfortable the city dweller in the midst of the wildlife, some facilities, conveniences, such as roads, toilets, campgrounds, had to be provided. And after they tasted "first blood of tourist money," they want more (p. 289). As the wild nature gets overcrowded with humans of inferior taste of nature, aesthetic value of nature goes down. As the nature gets overcrowded with humans, as it gets more civilized with human artifacts, the feeling of isolation in nature becomes more and more difficult. Needless to say, destruction of wilderness leads to decrease in population of many species, sometimes to the brink of extinction. Thus endangered species may also be considered as having scarcity value, like feeling of isolation in wild nature has (cf. Leopold, 1936b, p. 236).

3.2.3. Value of Fresh Air and Change of Scene

According to Leopold, fresh air and change of scene is another aesthetic component that nature provides to human beings. For the city dwellers, who have to live in between concrete blocks, and who are subject to every form of pollution, noise, air, water, light, etc., the air they breath and the landscape they have enjoyed in wild nature might be really invaluable to experience. According to Leopold, fresh air and the landscape, "like the photographic trophy … withstands mass-use without damage" (1966, p. 290). However overcrowded the wild area is, there will be

no dilution in the quality of the air breathed. And every person who has to work in an office or factory will experience the contrast between the city and wild life. In Leopold's words, "[m]ass-use neither destroys nor dilutes this *value*" (p. 290, emphasis added).

3.2.4. Value of Perceiving and Understanding Nature

Perception or understanding of nature through evolutionary and ecological studies is another human enterprise that Leopold values significantly. As it is known Leopold is very fond of hunting and fishing, especially if they are carried out by means of primitive methods and if game animals are naturally grown. However, as we have seen above, Leopold has a very broader perspective of hunting. He declared earlier that wildlife research was the most superior kind of sport, or avocation, which had many valuable aspects over bloody hunting (cf. 1966, pp. 219-21). For, first, "it entails no consumption and no dilution of any resource" (p. 290). Secondly, "[t]o promote perception [and understanding nature] is the only truly creative part of recreational engineering," and it has "potential power for bettering 'the good life'" (pp. 290-91). We see once more that Leopold instrumentally justifies value of nature for human beings. We should develop our perception and understanding of nature, because doing this contributes to our ultimate aim of attaining good life.

3.2.5. Husbandry as a Way of Getting to Appreciate Aesthetics of Nature

Husbandry, in Leopold's view, is another component to perceive and/or experience aesthetics of nature. According to Leopold, we do not have to have ecological education in the college or in the graduate school in order to appreciate the beauty and value of nature. He argues sarcastically that ecological education, even earning a PhD in ecology, sometimes might be a hindrance to grasp the mechanisms of nature. In his view, it is possible to educate ourselves by practicing in the midst of nature, and to develop a good taste as well. It is possible to perceive and understand the good of nature by working in the nature. Thus a farmer, at times, might develop an in depth knowledge and understanding of nature than a scientist who tries to get all knowledge from the books and laboratory work and who rarely toils himself/herself in the wild life. That is why, according to Leopold, experience of nature is no less important than the theoretical education of nature (pp. 291-293).

The five components that Leopold identified as the characteristics of aesthetic experience of wild nature can be classified under two headings. There are experiences which do not harm the aesthetic value of the experience in question independent of the number of benefactors who enjoy the experience. On the other hand, there are experiences aesthetic value of which is relative to the number of people who participate in the experience. For the latter, as the number of people who participate in the experience exceeds a critical value, some external and usually economically motivated human interventions may be put in practice. Among these interventions Leopold cites artificial game and fish cropping, building roads and some other facilities which will provide easy access and comfort to human beings. These interventions result in the dilution of the aesthetic value of the experience in question first, and secondly and more importantly, in destruction of wild life in the long run. According to Leopold, although hunting and fishing, trophy collecting (except taking pictures), are aesthetic exercises akin to a work of art, such as singing an aria on the stage, the pleasure these experiences give considerably decreases as they are artificialized through various human interventions. Artificial game and fish cropping, building roads and some other facilities into the wilderness, and some new industrial gadgets which make hunting and fishing "easier" for the greatest number of people possible do not only degrade the aesthetic value of the exercise, but also destroys the native flora and fauna in the long run. In addition, the solitude and feeling of isolation in nature becomes hardly possible as the number of people who want to enjoy the beauties of nature increases. On the other hand, taking pictures, enjoying the fresh air and the scene of nature, and researches carried out in the wilderness are, by and large, innocuous exercises which do not harm nature and its aesthetic value independent of the people who participate in these exercises.

As we have seen, Leopold conceives aesthetics of nature in terms of various satisfactions human beings get while they somehow come into contact with nature. As he boldly points out, pleasure we take is one of the strongest reasons in our striving for contact with nature (1966, p. 283). Furthermore, he also relates our various experiences in nature with the aim of good life. Variety of experiences in nature do not only promise pleasure or recreation, but also contribute to our having a better life through improving our perception of nature and its various aesthetic values (pp. 290-291). Our satisfactions that we get from nature depend, first of all, on the external circumstances of nature we will come in touch with. In Leopold's view, nature in its pristine state, as much as unspoiled and unsullied by human intervention, promises more aesthetic satisfactions with respect to the one tamed, artificialized, and relentlessly overcrowded by

humans. On the other hand, our level of good taste, ecological knowledge, and past experience with nature substantially affect our perception, understanding, and deriving aesthetic pleasure from nature. All the five aesthetic components that Leopold cites are strongly, and naturally, related with human interests and way of life. Leopold considers all these aesthetic components as a kind of aesthetic value. All of the values Leopold attributes to nature, in the final analysis, are subordinated to our deriving pleasure, or our having various satisfactions, and finally to having good life.

3.3. Callicott's Conception of Intrinsic Value

Callicott strives for describing environmental ethics in general, and the land ethic in particular, as an autonomous discipline rather than as a form of applied ethics. In his view, a nonanthropocentric value theory seems to be the most plausible ground in order to have environmental ethics as an autonomous area. He believes that not only human beings but also nonhuman beings and natural wholes, such as ecosystems, biomes, are intrinsically valuable. As it is known, not only Callicott, but also other philosophers like Holmes Rolston III, Paul Taylor, John O'Neill, deep ecologists, process philosophers, too, believe that nonhuman entities as well as human beings might have intrinsic value. As put succinctly by O'Neill, "[t]o hold an environmental ethics is to hold that non-human beings have intrinsic value" (O'Neill, 1992, p. 120).

Callicott suggests two different conceptions of intrinsic value. According to the first conception, intrinsic value exists in both human and nonhuman beings objectively. Philosophers like Rolston, Taylor and O'Neill believe that natural beings have objective intrinsic value. In other words, in their view, nature and its constituents have intrinsic value, irrespective and independent of a valuer. According to the second conception, on the other hand, intrinsic value is attributed to entities, humans and non-humans alike, subjectively. Callicott espouses subjective value approach rather than the objective one. He believes that talking about value of an entity does not make sense without a valuer. And he does not give credit to axiological approaches which insist on natural or non-natural objective criteria which attest our valuing of various entities intrinsically. He manifestly states that "intrinsic value cannot exist objectively" (Callicott, 1999f, p. 223). And he further asserts that "there can be no value apart from an

evaluator, that all value is as it were in the eye of the beholder," and that "value always necessarily involves a valu*er* as well as a valu*ee*" (1989b, p. 26, and 1999f, p. 224).

Callicott has devoted great deal of effort to suggest a nonanthropocentric value theory which he thinks necessary to establish an autonomous environmental ethic. In the following, I will question Leopold's conception of intrinsic value. Callicott has tried to bolster his conception of intrinsic value in various ways. I will analyze them in the following five subsections.

3.3.1. Analogy of Parent-Child and the Concept of "Truncated" Intrinsic Value

Callicott tries to buttress his nonanthropocentric subjective value approach first with Humean axiological foundations. In this sense, we, subjects, who are urged by our feelings and sentiments which are informed and amplified by reason, attribute moral value to some entities or objects. Nevertheless, even if this sounds prima facie plausible, he sees that it does not cohere well with the implications of intrinsic value. For it converts intrinsic value to an arbitrary subjective property which "originate with and depend upon a valuing subject and do not really belong at all to valuable objects" (1989e, p. 160).

Next, Callicott, being inspired by our disinterested love for children, and still relying on Humean axiological foundations, tries once more to show the plausibility of subjective value theory. Although we might love children due to some humanely interests, such as the joy of having time with them, or interests based on the future plans of parents on their children, etc., there is "something more," Callicott believes, than mere instrumental value that we attribute to children. He states that we value children for themselves. Similarly, we might value human species, or sentient beings, or the whole biotic community, for themselves, as well. Thus the Humean value theory and the example of our valuing children disinterestedly seems to provide a way out to value an entity for itself, even if not in and for itself. And hence, having armed with the knowledge provided by ecology, besides Humean axiology, we can, Callicott thinks, value nature for itself, as well.

Like Callicott, most of us believe that we love children disinterestedly, that is to say, we love them for their own sakes, not for some use value that we expected to get from them. Springing from this analogy, Callicott brings forward a new conception, which he calls, "truncated" intrinsic value. In Callicott's view, as we value our children "for their own sakes" rather than for

some use value, we may value both human and nonhuman beings, including wholes such as ecosystems, biomes, or nature as a whole, for their own sakes as well.

To clarify and make us understand his conception of intrinsic value, Callicott makes a distinction between intrinsic value and inherent value. If an entity has an objective value independent of the mind of the valuer, then that entity has intrinsic value. On the other hand, if, although the value of an entity is not independent of the mind of the valuer, it is valued for itself, irrespective of any use value it provides to the valuer, then that entity has inherent value. Callicott endorses the latter conception according to which entities are valuable for themselves rather than the former according to which entities are valuable in and for themselves. Callicott calls the latter conception "truncated" intrinsic value, simply because "in and for itself" locution, so to speak, is truncated and we are left only with "for itself" part (Callicott, 1999f, p. 224).[34] Thus, to repeat, in Callicott's view, we can value nature and its constituents for themselves, as the parents value their children.

Let us look at the analogy first. True, this analogy provides us an insight to conceive the possibility of intrinsic value besides instrumental or extrinsic value. But it leaves some residue of questions in our minds. For instance, we know that it is not the case that all parents value their children in the same degree. Furthermore, there might be examples which make us doubt whether parents value their children really disinterestedly. As Callicott admits, we may be valuing children due to the joy we have while interacting with them. Perhaps, we might unconsciously be concealing our instrumental or extrinsic expectations that make us value our children even from ourselves. Or, as children grow, their some extrinsic or instrumental values come to the surface, and the parents may incline toward these values of their children. For example, as the parents get older and need the help and affection of their children more, they may value the children who are closer to them more than the ones who stay away from them. No doubt, these and similar cases do not show that the children do not have intrinsic value. But they

---

[34] According to O'Neill, since the distinction that Callicott makes between intrinsic value and inherent value is not a universally accepted one, but rather peculiar to himself, it may lead to ambiguity rather than clarification. For instance, Paul Taylor tried to make a similar distinction before Callicott did, but he preferred 'inherent value' "to describe Callicott's 'intrinsic value' and 'intrinsic value' to describe his 'inherent value'" (O'Neill, 1992, p. 134, note 4). O'Neill gives other examples in which the same concepts are used in different meanings. Furthermore, Callicott, too, in his later works has given up using 'inherent value,' and preferred to use 'truncated intrinsic value,' or 'anthropogenic but nonanthropocentric intrinsic value,' or simply 'intrinsic value.'

make us doubt that the normative power of intrinsic value might not be higher than that of instrumental values.

Secondly, even if we admit that our children have intrinsic value, and that we value them for their own sakes, we still cannot make ourselves certain that nonhuman beings, too, have intrinsic value or that they might be valued for themselves. That is to say, we need a sound explanation which fills the gap and which shows how to extend intrinsic value to nonhuman beings.

On the other hand, as Monroe C. Beardsley argues, we might value entities for their own sakes even if they do not have intrinsic value (1965, p. 12). For instance, a collector may value a rare stamp for itself. Or a passionate hunter may value the head of an endangered game that s/he hunted and hang on his/her wall for its own sake. Needless to say, it is highly controversial whether that stamp or head has intrinsic value. If it is possible to value entities for their own sakes, even if they do not have intrinsic value, then Callicott's "truncated" intrinsic value theory is in trouble. In addition, if the intrinsic value attributed to children, or human beings, or nonhuman beings, or ecosystems is similar to the one attributed to the head of an endangered game, then the significance of "truncated intrinsic value" for environmental ethics becomes quite dubious.

Consequently, although parent-child analogy provides an insight to conceive what the concept of intrinsic value might be like, it does not suffice to ground the concept precisely. It lacks sufficient explanatory and normative power to persuade moral agents to believe that nonhuman beings have a special value other than their extrinsic or instrumental values.

3.3.2. The Concept of Intrinsic Value Inspired from the Quantum Theory

Nevertheless, even if we are content with Humean subjectivist value theory, there arises a problem. Suppose a subject, whose sentiments are excited by his/her faculty of reason which is informed by scientific knowledge, comes to value an object. But some other subject may value the same object differently, depending on his/her sociocultural make-up. Thus, it seems that we will not be able to arrive at universal value judgments on Humean axiological foundations. Rather we are committed to a sort of relativism.

To overcome this problem, being encouraged by some other thinkers including deep ecologists, Callicott considers that the new physics, or quantum theory, might provide a remedy. He states that environmental ethics might have a firm footing and be put into practice effectively only after we left "Baconian-Cartesian-Newtonian" worldview behind and endorse "Darwinian-Einsteinian-Leopoldian model" instead (Callicott, 1999b, p. 51). In addition, Callicott realizes that the new non-anthropocentric value theory, which, he believes, is necessary for an autonomous environmental ethic, had better be in conformity with the new scientific worldview. As he points out,

> although Hume's classical subjectivist axiology, evolutionarily explained by Darwin, and ecologically informed by Leopold, provides for inherent value in nature and thus a serviceable axiology for a properly environmental ethic, it is not consistent with a contemporary or post-revolutionary scientific world view. … Though consistent with Leopold's prerevolutionary scientific naturalism, Hume's subjectivist axiology betrays the deeper intuitions of Leopold's essentially ecological and organic vision of reality (1989e, p. 166).[35]

He thinks that quantum theoretical world view leads to the abandonment of all the bifurcations that old mechanistic world view suggests, such as between object and subject, or fact and value.[36] Having welcomed and affirmed the quantum theory, Callicott tries to utilize it to delineate a new axiology which he thinks fits well with the land ethic. He asserts that

> [a] fully consistent contemporary environmental ethic … requires a theory of noninstrumental value of nature which is neither subjectivist nor objectivist. … Perhaps quantum theory may serve as a constructive paradigm for a value theory for an

---

[35] Callicott, at first, have tried to strengthen Leopold's land ethic basically with a Humean-Darwinian conception of nature combined with some inspiration from quantum physics. But he states here that Hume's subjectivist axiology is not consistent with the new worldview, inspired by the quantum theory, and with "the deeper intuitions of Leopold's essentially ecological and organic vision of reality" (1989e, p. 166). Presumably, Callicott might have intended to bolster the land ethic with a series of historical philosophical and scientific backing which he thinks that fits well with land ethic, beginning basically from Plato (Callicott argues that the roots of the holism of land ethic, and the concept of health might be found in Plato's conception of the good of the state as a whole, and his conception of the health of the soul and body (Callicott, 1989b, pp. 28-29, and 1999h, pp. 333-335) to Hume, Smith, Darwin, and finally Heisenberg, Planck, and other figures of the new physics, symbolized in the name of Einstein. Indeed, although he states above that Hume's subjectivist axiology is not consistent with "the deeper intuitions of Leopold's essentially organic vision," he earlier had said that "the Hume-Darwin-Leopold approach is the best suited for an ecocentric environmental ethic" (Callicott, 1989a, pp. 8-9).

[36] O'Neill criticizes value theories which are inspired from quantum theory. He states that it is exaggerated an interpretation that the quantum theory makes all characteristics observer dependent and ontologically equal. In his opinion, such interpreters instrumentalize the quantum theory in order to bolster their own views (O'Neill, 1992, pp. 126-127).

> ecologically informed environmental ethic, as well as an occasion for the deconstruction of the classical Cartesian metaphysical paradigm and its Humean axiological interpretation (1989e, p. 166).

But is it not interesting to see that Callicott insists on the necessity of "a theory of noninstrumental value of nature," although he fervently welcomes the quantum theory for he thinks that the latter abandons all the bifurcations between subject and object, fact and value, etc.? He anticipates that "[t]he factoring of experience into either exclusively subjective or objective components will be as otiose for future philosophers as the factoring of properties into the categories of essential and accidental has been for modern philosophers" (p. 167). Then why do we not consider about the redundancy of the factoring of values into the categories of intrinsic and instrumental? He applauds the new physics for he thinks that it collapses the Cartesian "*res cogitans* … into the *res extensa*" (1989e, p. 168; 1999f, p. 232). Not only this, he thinks that it also "collapses the distinction between [Lockean] primary and secondary qualities" (1989e, 169). But does he still want to retain the dissociation between intrinsic and instrumental value?

Callicott's answer does not seem to be an overt "yes." Since it is no more possible to differentiate object from the subject (for they are in continuous interaction, and they constitute each other), "we may certainly not assert that value in nature is intrinsic, that is, ontologically objective and independent of consciousness," Callicott says (p. 169). Because "*no* properties in nature are strictly intrinsic" (p. 169). And in the light of quantum theory he asserts that

> values are virtual. Virtual value is an ontological category encompassing all values. Within its purview fall the entire spectrum of instrumental and inherent values. … In other words, nature affords a range of potential value; some things are potentially instrumentally valuable … and some things (*sometimes but not always the same things*) are inherently valuable … (pp. 169-170, emphasis added).

So, does the new physical world view collapse the distinction between intrinsic value and instrumental value as it did between *res cogitans* and *res extensa*, or between fact and value, or between primary qualities and secondary qualities, or not? Yes it does, but no it does not! Yes it does, because Callicott seems to want to abandon intrinsic value of nature which is "ontologically objective and independent of consciousness." But no it does not, because we still have a range of potentiality of values of nature; on the one hand, there are entities which are "potentially instrumentally valuable," and on the other hand, there are entities which are "[potentially?] inherently valuable."

So, what do we gain through looking into the world of values from the glass of the new physics with the guidance of Callicott? Callicott abandons [or wants to abandon] the dissociation between intrinsic value and instrumental value [through the new physical world view?], but retains the one between potentially instrumental value and potentially inherent value. What is the difference between intrinsic value and inherent value? According to Callicott, the former corresponds to the value which "is objective and independent of all valuing consciousness" (p. 161, and cf. p. 169), whereas the latter corresponds to the one which "is not independent of all valuing consciousness" but something which "is valued for itself and not only and merely because it serves as a means to satisfy the desires, further the interests, or occasion the preferred experiences of the valuers" (pp. 161-162).

But, as Callicott said earlier, this distinction was already being afforded by Humean subjectivist axiology (p. 162). Then what is the difference between the Humean subjectivist value theory and the quantum theoretical one? Callicott admits that the difference "is less practical than theoretical" (p. 170). Practically, both accounts allows for valuing nature for its own sake. However since "the quantum theoretical axiology…renders an account of value which puts values on an ontological par with other properties, including culturally revered quantitative properties," it seems, to Callicott, superior to the Humean axiology (p. 170).

Callicott concedes that there is not much practical difference between subjective value theory and quantum theoretical value theory. We are free to attribute intrinsic value to nature in both theories. Furthermore, both theories reject the existence of objective intrinsic value, though they retain the subjective one. Let us look at the theoretical difference, then. Callicott believes that quantum theoretical value theory makes values ontologically on a par with all the other properties, including culturally acquired properties. Presumably, Callicott believes that ontological egalitarianism that quantum theory bestows on us also provides the opportunity to avoid the criticism of cultural relativism directed to subjective value approach. For the subjective value approach may lead to cultural relativism as value judgments that humans make might be affected from the culture into they were born. However, if every property is ontologically on a par with every other property, does this fact not make the qualifier "intrinsic" redundant in the concept of "value?" For those who think that I am too impetuous to abandon intrinsic value I simply remind them of what Callicott boldly says, again: "*no* properties in nature are strictly intrinsic, that is, ontologically objective and independent of consciousness. Borrowing now from

the vocabulary of quantum theory, we may assert, rather, that values are virtual" (p. 169, Callicott's emphasis).

3.3.3. Extension of Intrinsic Value from the Self to Nature

Considering those who might not be satisfied with the quantum theoretical value theory, Callicott dares to be more speculative and goes "deeper." Having inspired by the quantum theory and its interpretation by deep ecologists, Callicott argues that quantum theory does not only allow us to abandon the separation between object and subject but also the one between the self, or I, and nature. As object and subject cannot be separated from each other, rather they constitute one another, the self, or I, cannot be separated from nature, either; and they, too, constitute one another. Thus, if the self and nature is one entity, and if we believe that the self, or I, is intrinsically valuable, then inevitably so is nature (Callicott, 1989e, pp. 171-74).

Nevertheless, this argument presupposes the intrinsic value of the self without needing to prove it. Indeed, as Callicott states, "[m]ost systems of modern ethics, both formal philosophical systems (e.g., Kant's deontology), and less popular system (e.g., the Christian ethic), take it for granted that human beings are intrinsically valuable" (Callicott, 1989g, p.131). But interestingly, Callicott does the same in order to show that nonhuman beings are intrinsically valuable. Similarly, many of us believe that we, human beings, are intrinsically valuable, and think that this is a self-evident and uncontroversial truth. But is it really so? In fact, to my knowledge, we do not have philosophical or empirical evidence which conclusively show that humans are intrinsically valuable beings. But there are some religious and moral preaching which asserts that humans have a privileged status with respect to other beings on earth, and that nonhuman beings are created to satisfy needs of humans, and that humans are endowed with features that nonhuman beings do not have, etc. These kinds of saying might have made us get used to the idea that humans have intrinsic value, and even believe that it is an indubitable fact. But unless it is shown by a philosophical argument or empirical evidence, the claim that humans are intrinsically valuable beings is nothing more than a groundless presupposition.

Furthermore, Leopold, too, casts doubt upon the attribution of a special value to human beings. According to Leopold, the presupposition that "man is the end and purpose of creation, and that not only the dead earth, but all creatures thereon, exist solely for his use" stems from the

pompous wishful thinking presumably amplified by religious teaching, or mechanistic philosophy (Leopold, 1923, p. 95). Moreover, he argues that human beings have not acted in such a way that proves that they have such "a special cosmic value, distinctive from and superior to all other life," or "special nobility inherent in the human race" (p. 97).

In addition, even if we accept that human beings have intrinsic value, can we extend that value to the whole nature only due to the fact that humans are parts of nature? For instance, could we willingly defend that cancerous cells, or fatal viruses, which are also parts of nature, are intrinsically valuable? There should be a sound explanation which shows whether this conception of value can be extended to the whole nature. The assertion that quantum theory abandons the distinctions not only between object and subject, or fact and value but also between self and nature does not suffice to justify that extension.

3.3.4. Teleological Proof

This argument aims at proving the existence of intrinsic value by explicating the relationship between means and ends. "The existence of means," says Callicott, "implies the existence of ends" (1999g, p .241). A means may exist for some other means but if one can pursue the chain of means till the end s/he is believed to arrive at some end which is not a means to anything. This end, which is not a means to anything, is called an end-in-itself. "And since means are valued instrumentally and ends-in-themselves are valued intrinsically, if ends-in-themselves exist – and they must if means do; and means do – then intrinsic value exists" (p. 241).

This argument, which reminds "the first mover" argument of Aristotle or "the argument from design" to which some theologians often appeal, is far from proving the existence of intrinsic value. First, this argument seems to presuppose the train of means as if one end were closed. But why do we not think that the train of means as unlimited on both ends, or as a web in which means and ends have a complicated and reciprocal relationship with each other so that we do not need to look for an end-in-itself or an end which is never means to anything? If we think this way, as Beardsley states, we do not need to seek for intrinsic value in the chain of means and ends: "reasonable decisions about instrumental values do not presuppose … previous reasonable decisions about intrinsic values … So there is no infinite regress in a purely instrumentalist theory of value (1965, p. 8).

Secondly, according to the teleological argument given above, in order to say that both human and nonhuman beings have intrinsic value, we need to show that all these beings are ends-in-themselves. For a being has intrinsic value if it is an end-in-itself. Kant's ethical theory, as it is known, prescribes that human individuals must be treated as ends and never as means only. But even if we admit what Kant's categorical imperative commands, we still need to show that nonhuman individuals and further that collectives, such as whole species, ecosystems, etc. are ends-in-themselves, as well. For the land ethic, as understood by Callicott, presupposes that not only human individuals but also nonhuman ones and wholes have intrinsic value, too.

Thirdly, Tom Regan, who is a resolute defender of animal rights, argues that Callicott inevitably falls in contradiction, at times, by granting the intrinsic value of a wide spectrum of entities. Callicott believes that not only human and animal individuals have intrinsic value but also collectives such as ecosystems, biomes do. Furthermore, Callicott allows humans to manage and control population, including killing (or culling), of some individual beings in order to protect wholes, such as a particular ecosystem, like Leopold does. Nevertheless, Callicott grants that both individuals and wholes have intrinsic value; hence both are ends-in-themselves. So how is it possible to justify eradicating some end-in-itself in favor of some other one (Regan, 1992, pp. 175-76)?

Perhaps it might be possible to relieve this trouble by acknowledging a hierarchical conception of intrinsic value. Could we, for instance, attribute more intrinsic value to an ecosystem than an individual deer which live in that ecosystem? By subjecting entities to a hierarchy with respect to their intrinsic worth, could we allow ourselves to kill some members of overpopulated deer community when we observe that they risk the sustainability of the ecosystem? However, Regan argues that hierarchical conception of intrinsic value does nothing but unnecessarily overpopulates concepts. One can justify culling of some animals simply by weighing instrumental values. Thus, for instance, we are allowed to kill some deer if we think that they imperil the sustainability of a particular habitat; but we do not kill them, if we think that their number are appropriate and that they are instrumentally good for that habitat, e.g., by providing a more diverse environment. Consequently, as Regan shows, if Callicott endorses an egalitarian conception of intrinsic value, this, at times, makes him fall into contradiction when there is a conflict of interest between different entities which are supposed to be ends-in-themselves, hence which have intrinsic value; on the other hand, if he endorses a hierarchical conception of

intrinsic value, this does not help him more than the case in which one endorses and applies an instrumental conception of value.

3.3.5. Phenomenological Proof

This proof springs from, as the name implies, from a phenomenon. Scientist Edwin P. Pister started a struggle in order to save from extinction an endangered species of desert fish called "Devil's Hole pupfish" which live in small pools of water. The fish in question do not seem to have any instrumental value for humans. After a long and hard work Pister has attained his purpose. But his hard struggle has, at times, been criticized, or worse, mocked even by his own colleagues. Since they seemed to take Pister's fight "worthless" they could not stop themselves but asked: "what good is it?" What Pister responded in return was striking: "what good are you?"

In Callicott's view, Pister's reply has a special importance; for it forces any human being, who values oneself beyond his/her instrumental values alone, to question why only human beings have the right to live safely in freedom and to pursue happiness. "Human dignity and the respect it commands," says Callicott, "is grounded ultimately in our claim to possess intrinsic value" (1999g, p. 240). And he believes that Pister's case serves as "the phenomenological proof" which shows "the existence of intrinsic value" (p. 240). In his view, questioning the existence of intrinsic value is tantamount to doing the same for consciousness. "We experience both … introspectively and irrefutably" (p. 240).

It should, first, be recalled that, as Callicott mentions, though in passing, The Devil's Hole pupfish are able to live in several times saltier water than seawater. Pister considers that "the secrets of its remarkable kidney could be used in treating people with renal disorders" (p. 240). But Callicott insists that "[w]hether they had instrumental value or not, they had, Pister believed, *intrinsic* value" (p.240, Callicott's emphasis). In Callicott's view, the secrets of remarkable kidney of the Devil's Hole pupfish promise only "*speculative* utility" (p. 240, Callicott's emphasis). According to Callicott, this was not what motivated Pister to dedicate himself to save the lives of the fish in question. Pister felt himself morally responsible to preserve them, and the reason behind this moral responsibility was "definitely" intrinsic value irrespective of their "speculative utility."

Nevertheless, we can think of ourselves, as if we are in the place of Pister, and try to "experience … introspectively," as Callicott says, and ask the following question: if I were to decide to struggle to save from extinction a species of fish which "never provide sport or meat," which of the following two options would drive me to act more forcefully?

1. Granting that these fish have intrinsic value.
2. Considering the possibility that their special kidney mechanism may open the way for curing the renal diseases of human beings in the future.

It would not be fair to say that the first option does not have any normative power. For Callicott, at least, it indubitably does. But, personally, for me, and presumably for the vast majority of human beings, normative power of the second option far exceeds that of the first one. Callicott may contend that thinking that second option has more normative power than the first stems from anthropocentric world view. Thus he may say that that anthropocentric motivation does not show that the Devil's Hole pupfish do not have intrinsic value. Sure. But how does the supposition that Pister were driven by believing that they have intrinsic value show that they do have intrinsic value? Or how could Callicott's, or some other's, personal experience of a concept "introspectively" be taken as a universal proof of that concept? Callicott, by phenomenological "proof," seems to expect us to believe intrinsic value of nonhuman entities through the impact of the question which makes us question the value of our own self. However, I believe that Pister's case is a nice anecdote which invites us to interrogate the value of our own rather than a proof which shows the existence of the intrinsic value of human and nonhuman beings.

On the other hand, the question "what good are you?" might presumably have had an impact on me, if I had asked Pister, like the colleagues of Pister did, that "what good is it?" But, in my opinion, the degree of that impact would not be independent from my life story and my understanding of my own life and nature. If I have any value at all this is mostly due to what I have done during my life by means of my given capacities in the midst of plethora of lucks, troubles, opportunities, obstacles, chances, disasters, necessities, and coincidences with which I have continuously confronted. What I have contributed to both myself and others during my life might suffice to feel myself valuable. If, beyond these, I do not need to attribute intrinsic value to myself, I would not attribute such value to others either.

Furthermore, could (or should) every human being think in the way like Callicott does? I personally concede that it seems something more noble, or honorable, or heroic, an attitude to try to save a species without taking into account its use value. But should we expect this nobility from every human being? Is it realistic or practicable to expect this? Leopold, for instance, seems more likely to take into account a wider spectrum of people to move for conservation. As we have seen, he argues, like Callicott, that we should not let species go extinct. For, first, they have, besides many other values cited in the previous sections above, some aesthetic value peculiar to the species. Once they have gone, they cannot be re-created. This makes their aesthetic value superior as compared even to a work of art. But Leopold is aware that not every human being does have such a higher "good taste." Therefore, secondly, for those who do not have such a subtle good taste by means of which one can appreciate the aesthetic value of an endangered species, Leopold suggests appealing normative power of use values – *pace* Callicott, even if these values are "speculative" – in order to motivate people to take side on conservation of endangered species. As we have seen earlier, Leopold frequently tries to justify conservation through instrumental reasons and motivate human beings via these.[37] One of these resembles Pister's case a lot. Leopold argues that we should not let species become extinct even if they presently seem useless. For we may need to use them in the future for a purpose we could not anticipate for the time being. For instance, as "we use some prairie flowers to reflocculate the wasting soils," we may, in the future, benefit some other species, which seems useless for the time being, to satisfy some other interests:

> [I]ncredibly minute quantities of certain substances determine the value of soils to plants, of plants to animals. … What of the vanishing species, the preservation of which we now regard as an aesthetic luxury? They helped build the soil; in what unsuspected ways may they be essential to its maintenance? ... [W]e use prairie flowers to reflocculate the wasting soils of the dust bowl; who knows for what purpose cranes and condors, otters and grizzlies may some day be used (1939b, p. 271; 1966, p. 258).

As I indicated, Leopold incorporated above passage, verbatim, in the *Almanac*, as well. So, according to Leopold, a species which might seem, for the time being, unimportant for us, hence preservation of which could be thought "as an aesthetic luxury," may be proven to be useful in the future. Thus Leopold implies that the awareness of that possibility might make people, who

[37] cf. e.g., Leopold 1925c, p. 135; 1927c, p. 127; 1931, p. 158; 1934a, p. 193; 1936b, p. 236; 1941b, p. 289; 1941c, pp. 193-194; 1944, pp. 317-319; 1945; p. 326; 1946b, p. 224; 1947a, pp. 336-37; 1966, pp. 211-212, 226-230, 276, 283- 292.

do not have a sophisticated sense of aesthetics of nature, at least, to endorse a conservationist outlook. Such people may be made to realize the value of nature and may be made to act accordingly by showing concrete examples of natural entities' actual or probable use values.[38]

Let us return to the question that the colleagues of Pister asked him, namely "what good is it?" They asked this question because they believed that Devil's Hole Pupfish were "worthless" for human beings. Presumably they did not feel that this species had intrinsic value as Callicott did, or as Callicott said that Pister did. Let us suppose further that they did not have the sophisticated "good taste" to appreciate the aesthetic value of the endangered species in question, either.

Do we not have any other way to make them understand, or better, join the conservationist club? Surely, it is possible to respond their question as sharply as Pister did, i.e., by embarrassing them due to their inconsiderateness. Perhaps such a striking response might not only embarrass but also might make them question themselves whether nonhuman beings might have value other than instrumental value, as Callicott supposed. But is such a question, at the same time, not something which may lead to ossify the position of the addressee, and force him/her to defend himself/herself within the limits of their ethical universe, somewhat more fiercely? Could not Pister, for instance, explain the "goodness" of the fish in question by referring to their "speculative utility," instead of responding his colleagues with an immediate sharp question? Which attitude is more transformative, if we really want to strengthen the conservationist community?

Leopold would most presumably have favored the second attitude. Indeed, as we have seen above, Leopold does not mention intrinsic value of condors, cranes, otters or grizzlies, but only their "speculative utility," which might be revealed in the future, for us, human beings. This is an important difference between Leopold and Callicott. And we cannot simply pass it over. Because Leopold's view is expressed not in an earlier work, but in a work which was written in 1939, and later, this was also incorporated in the *Almanac*'s "The Land Ethic" section.

---

[38] This is not the only instance Leopold emphasizes possible use value of natural beings, however they seem useless for the time being. For instance, in the section "The Round River" in Leopold 1966, he warns us that native prairie flora might be used "to rebuild the wasting soil of prairie farms" (1966, p. 194).

On the other hand, is presupposing that a species has intrinsic value less "speculative" than hoping that science may show that it has some instrumental value which is not known for the time being? Or is it definitely immoral to think, for instance, that Devil's Hole Pupfish should be saved, because investigating its special kidney mechanism may contribute to curing human beings or other animals with renal disorders in the future? Or is it less moral to act to save an endangered species having the thought that it might have some instrumental value for human beings, which is not known yet, than having some "speculative thought" that it has intrinsic value? Furthermore, is it not possible to refer both instrumental and intrinsic value of natural entities to unite and strengthen the power of conservationist community among the members of which there might naturally be diverse viewpoints about value? Above all, why do we have to make a choice between intrinsic value and instrumental value in order to motivate human beings to act in accordance with the objectives of conservation? We know that the level of awareness, or consciousness, or sensitivity, and knowledge of people about natural entities, and conscience they have toward them constitute a wide spectrum. So why do we, conservationists, not try to endorse a broader and pluralistic perspective and to persuade this wide variety of people by taking into account their diverse conceptions, understandings, value systems, etc.? Leopold was aware of that fact, and he did not expect everyone, for instance, to have a sophisticated "good taste" to appreciate aesthetic value of endangered species. Rather, he had also suggestions for those people who have somewhat "inferior taste," and tried to convince them even by "speculative utility" of species which might be found out in the future, if these species do not have some actual or visible use value known in the present.

3.4. Value, Good, Good Life, and Normativity

If a being has some values, extrinsic, intrinsic, instrumental, or whatever, does this suffice to show that that being ought to be protected? We know, at least, since Hume posited "is/ought" problem, that we cannot deduce such a conclusion. John O'Neill, who defends that not only human beings but also nonhuman beings have objective intrinsic value independent of a valuer, argues that it is not possible to entail the conclusion that a being ought to be protected for it has some good. In his view, even if we may show that a being is intrinsically valuable, in and for itself, this does not suffice to make it morally considerable, or to bestow morally responsibility upon us for the protection of the being in question (O'Neill, 1992, pp. 131-132).

For instance, a farmer or a scientist may acknowledge that tomato moth (*Tuta absoluta*) has some goods or values peculiar to itself, and may know how to protect it. But all these do not morally compel him/her act for the good of that species. Further, we cannot morally blame him/her, if s/he fights to destroy the species in question. We can think of cancerous cells, various fatal viruses, bacteria and germs, or dictators, etc. in a similar vein. In short, as O'Neill states, a being X might have some good Y, but having Y does not suffice to make X morally considerable (pp. 128-132).

Nevertheless, this is a notorious problem from which many ethical arguments suffer. Despite this, ethicists either continue to construct arguments without regarding "is/ought" barrier, or they try to bridge the gap with additional premises.

On the other hand, it would be unfair to say that ethical arguments which suffer from "is/ought" problem do not have any normative power. Many ethical arguments, which are wounded with this problem, have been posited, and they have had considerable impact on human behavior, various sanctions, or many positive laws enacted or abandoned throughout human history.

We have seen above that Callicott suggested Edwin P. Pister's fight for Devil's Hole pupfish as "phenomenological proof" for the existence of intrinsic value. Callicott argues that what moves Pister for a species which does not seem to have any instrumental value for human beings is its having intrinsic value. That is to say, Callicott believes that a being's having intrinsic value has a great deal of normative power to incline us to think that it is morally considerable, and act accordingly. Let us call the premise that "X has intrinsic value," P. In Callicott's view, P moves Pister to save X. Perhaps it does. Nevertheless, X also has Y (let us call this premise Q) where Y is a feature of X, and investigation of Y might contribute to the well-being of humans in the future. And let us call the premise "Y of X might serve to the well-being of humans in the future," R. I raise the following question: Could Pister, or some other person, be moved by R in order to save X? Callicott does not answer that question. He just underlines that Pister was moved by P. In his view, R promises just "speculative utility" (Callicott, 1999g, p. 240). But he does not argue against the normative power of R.

On the other hand, we do not know whether the colleagues of Pister realized "introspectively and irrefutably" that Devil's Hole pupfish have intrinsic value, when they were responded by Pister

“what good are you?” to their question “what good is it?” (p. 240). Let us suppose that Pister responded their colleagues with providing the premise R given above, instead of the question “what good are you?” I believe that considering this supposition reveals the normative power of R more clearly. If Pister had acted in this way, he would not have ended communication by embarrassing his colleagues, and would have positively appealed to their value conception.

The various values that we attribute to the beings, humans or nonhumans, might move us on behalf of these beings. But the question that which values have more power to move us might not be responded by a single universal answer. Callicott believes that intrinsic value outrun any instrumental value in this respect. But, in contrast, I suggest that normative power of values cannot be thought independent of biopsychosociocultural and cognitive background and development of human beings. Callicott and some others may act to protect beings for they do believe that those beings have intrinsic value, without even thinking whether these beings have any instrumental values or not. But some others, like the colleagues of Pister, for instance, might question, first, whether these beings promise any utility for themselves or human beings in general. The latter approach might be more anthropocentric with respect to the former, but we need not dispense with it as immoral. Taking into account expectations and purposes of environmental ethics, it does not seem plausible and practical to extol one while disparaging and rejecting the other.

As O’Neill points out, we may also try to fill the logical gap in our ethical arguments in order to overcome “is/ought” barrier. He suggests, for instance, that we can benefit from Aristotelian concept of good life, and try to bridge the gap between the intrinsic value of beings and their moral considerability. O’Neill’s argument might be as follows:

1. X has intrinsic value.
2. Good life, or happiness, or eudaimonia is the only ultimate end to be pursued, i.e., the end “that we do always choose because of itself and never because of something else” (Aristotle, 2002, Book I.7, 1097b1-b2).
3. Protecting a being which has intrinsic value contributes to the end of good life.
4. Therefore X ought to be protected.

As we will see in more detail in the fourth chapter, Leopold, too, refers to the concept of good life in his works. He frequently mentions the terms "good life," "community welfare," "human welfare," and relates these concepts with conservation or why we should protect nature.[39] In his view, nature is the instrument for our self-expression. We should protect nature, because we can be happier in a biotic community, integrity, stability and beauty of which is preserved. Although he attributes variety of values to nature and its constituents, he does not state intrinsic value in any of his works. Thus his argument might be as follows:

1. "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community" (1966, p. 262).
2. Protecting X contributes to the preservation of the integrity, stability, and beauty of the biotic community.
3. Therefore, it is right to protect X.
4. Good life, or happiness, or eudaimonia is the only ultimate end to be pursued, i.e. the end "that we do always choose because of itself and never because of something else" (Aristotle, 2002, Book I.7, 1097b1-b2).
5. Doing what is right contributes to the end of good life.
6. Therefore X ought to be protected.

Both arguments entail the same conclusion. Which one is more persuasive? Or which one has more normative power to move us for conservation? As it was stated above, this depends on the biopsychosociocultural and cognitive development of addressees of the arguments. On the other hand, both arguments are not mutually exclusive, they can jointly be used to motivate people for the conservation purposes.

Callicott's nonanthropocentric value theory and the arguments he posited in order to justify the existence of intrinsic value in nature give us some insight to conceive what intrinsic value of nature and its parts might be like. We may consider that nature and its constituents might have a different sort of value which cannot be described in terms of instrumental values. As we have seen in this chapter Leopold provides us a variety of instrumental values of nature. Furthermore,

[39] As Leopold points out "[s]table (i.e. healthy) land is *essential to human welfare*. Therefore it is unwise to discard any part of the land-mechanism which can be kept in existence by care and forethought" (Leopold, 1941c, p. 194, emphasis added).

unlike Callicott, he does not dismiss even probable instrumental values and suggest us taking into account these kinds of values as well. His list of values may not be exhaustive. Some other philosopher might indicate other kinds of values which do not exist in Leopold's list. Perhaps, intrinsic value might be a probable and significant candidate which might be added to Leopold's list of values. But we have seen that Callicott's arguments posited in order to show the existence of intrinsic values have serious problems. Thus his aim to establish an autonomous environmental ethic which rests on a nonanthropocentric axiology might make sense only after he, or some other philosopher, could provide us a full-fledged nonanthropocentric value theory.

According to Callicott, "if nature lacks intrinsic value, then *nonanthropocentric* environmental ethics is ruled out" (1999g, p. 241, Callicott's emphasis). We do not know yet whether nature has a value other than instrumental values, although we are certain that it has innumerably many instrumental values. As far as Callicott's efforts to postulate a nonanthropocentric value theory are taken into account, it is possible to say that it is a hard task to show that nature has intrinsic value. Thus, for the time being, perhaps we should not hastily dismiss the possibility of a nonanthropocentric environmental ethics. Because we do not know for sure whether nature has intrinsic value or not. Nevertheless, until we have a sound nonanthropocentric value theory, or until we are shown that nature has intrinsic value, like that it has instrumental values, we may content ourselves with, and try to develop, a weak anthropocentric environmental ethics which emphasizes variety of instrumental values of nature and which relates flourishing of nature with our own flourishing, as Leopold's land ethic promisingly does.

Furthermore, as a compromise, I dare to speculate that Leopold would not argue against attribution of intrinsic value to nature and its components. For he might think that attribution of intrinsic value might contribute to growing the embryo of conservationist movement (Leopold, 1933b, p. 182, and 1966, p. 239). But this does not mean that he has made so. He has tried, with every attempt he could do, to show the significance of nature for human beings. As we have seen above, all of the values he attributed to nature contribute to the human good or human welfare. He does not seem to urge, unlike Callicott does, land ethic as an autonomous discipline which would have to be founded on a nonanthropocentric value theory. He does not require humans attribute intrinsic value either to themselves or nonhuman beings. He suggests many kinds of values of nature, all, in the final analysis, are subordinated to human good. But, as just a moderate speculation, I can say that he might not object to those who wanted to attribute "a

special cosmic value" to nonhuman beings, even if he manifestly argued against attribution of such value to human beings, for they acted like potato bugs who exterminated themselves while exterminating potato (1923, p. 97).[40] Perhaps, what Leopold says below may confirm my speculation:

> [I]t is poor business to prove that one good thing is better than another. The point is that some six or eight millions of Americans like to hunt and fish, that the hunting fever is endemic in the race, that the race is benefited by any incentive to get out into the open, and is being injured by the destruction of the incentive in this case. To combat this destruction is therefore a social issue (1966, pp. 232-33).

Nature is good and valuable. As Leopold shows, we, humans, can justify goodness and value of nature in innumerable ways. We may value nature on instrumental grounds, i.e., which are subordinate to human well-being, both in the present and in the future, as Leopold himself did. Or we may value it in a deeper and mystical way, like Callicott prefers to do. Both are good, and no need to argue which is better. But as Leopold underlines, conservation is a human affair; if we can recognize its necessity, it would be realized "under human dominance" (1942c, p. 199). Fighting against the destruction of nature "is a social issue" (1966, p. 233). And no doubt it is a "good thing," for the benefit of human race, or if you like, for itself, or in itself, or for and in itself.

[40] We have seen in Chapter 2 that Leopold argues against human beings' having a special value which is used as a sufficient reason for dominating the rest of nature. On the other hand, he argues that there are objective evidence of human superiority over the beasts. But human superiority over the beasts does not rest on a special value attributed to humans. All the evidence Leopold cites are strongly related with moral agency of human beings. If human beings are really superior, they should prove this by, e.g., establishing a decent society in which all members are respectful, and all members respect all other life, take care of whole nature rather than recklessly destroy it. Leopold sees evidence of these in some lovers of nature. For instance, there are lovers of nature who mourn for the loss of nonhuman species. Or there are people who accept responsibility for nonhuman members of nature. In other words, objective evidence of human superiority lies in humans' moral agency, in their capability of accepting and enlarging their scope of moral responsibility incomparable with any other being on earth, not in some pretended special cosmic value.

CHAPTER 4

IS LEPOLD PRESERVATIONIST OR CONSERVATIONIST?

Making conceptual distinctions is one of the significant jobs of philosophers. Indeed, concepts and arguments formed by the use of various concepts are the main tools of philosophers in establishing philosophical theories and systems. Unless conceptual distinctions are made and conceptual analyses are carried out, we might have difficulty in understanding the world and the various relations that we have constructed between the world and ourselves. Or the other way around, in our quest to understand the world and ourselves, we do need to make some conceptual analyses and clarifications. On the other hand, conceptual distinctions and analyses may lead to forming new concepts, and to new distinctions to be made, so and so forth. As we continue to understand the world, we develop a conceptual realm which is established on the heritage of history of science, philosophy, and of culture in general. The more developed our conceptual realm is, the more we are aware of the conceptual realm we are in, and the more we are able to distinguish myriad of concepts in this realm, the better we understand the world.

As I pointed out above, concept formation and concept clarification is an unending process in our quest for understanding the world. At times, we may refer to some recently formed or clarified concepts to understand or analyze a view or theory during the formation of which conceptual clarifications in question were not made yet. Thus we can retrospectively use some "new" concepts to understand an "older" theory or view. Sometimes, a philosopher or a theoretician might have had the conceptual resources, but did not make, or did not need to make, the conceptual clarification that could have made his/her readers understand his/her views much better. In other words, the concept could already be in his/her views, but s/he might not have named or clarified it yet. In such cases, new concepts formed, or new conceptual clarifications made, might open new windows to understand the view or theory in question. Let us call this retrospective conceptual analysis of a view or theory. In this chapter I will try to make such a retrospective conceptual analysis.

4.1. Conceptual Distinction between Preservation and Conservation

4.1.1. Passmore's Distinction of Preservation from Conservation

There is a subtle distinction made between "preservation" and "conservation" in environmental philosophy. This distinction is a relatively new one that we owe to Australian philosopher John Passmore. As Bryan Norton points out, Passmore, in his *Man's Responsibility for Nature*, which was first published in 1974, distinguishes some environmental thinkers and activists as preservationists or conservationists depending on their value attribution to human beings and natural entities, and their concern for interests of humans as opposed to their concern for the interests of nonhuman entities. According to the distinction made by Passmore, a conservationist is assumed to be more human interests oriented. Nature is thought to be "conserved" for the sustainable satisfaction of human interests. However, a preservationist is thought to be suggesting protecting nature for the sake of nature itself rather than for the sake of human beings. Thus, according to Passmore's analysis, conservationists are assumed to attribute instrumental values, whereas preservationists are assumed to attribute intrinsic value to natural entities (Norton, 1986, p. 196). In Passmore's own words: "To conserve is to save. … I shall use the word to cover only the saving of natural resources for later consumption. … Where the saving is primarily a saving *from* rather than a saving *for,* the saving of species and wildernesses from damage and destruction, I shall speak, rather, of 'preservation'" (Quoted in Norton, 1986, p. 197).

4.1.2. Pinchot, the Conservationist, and Muir, the Preservationist

As we often observe, conceptual distinctions may lead to formation of factions, as well. This has been in fact the case among environmentalists, too. Especially after the distinction made by Passmore, some environmentalists have begun to identify themselves or others as conservationists or preservationists. And conservationists and preservationists have usually been thought to be opposing camps in the environmentalist movement. This opposition has even been carried back to the inception of the movement when there was no such clear distinction made yet. Thus Gifford Pinchot, who believed that nature should be preserved to meet the needs of humans, and that it can be managed to satisfy human demands more effectively, was identified as the leading figure of conservationism. And John Muir, who was a contemporary of Pinchot

and who defended that nature should be preserved as it is and for its own sake and that it should not be modified solely for the satisfaction of human interests, was identified as the archetypical figure of preservationism. Pinchot and Muir were friends for a while. However their friendship came to an end as they pursued their different motives toward nature and as they crystallized these motives in their views and acts through time. These two leading figures of environmentalism had come to a real opposition especially with the project of construction of a dam on the Hetch Hetchy Valley. Pinchot supported the project for he believed that it was compatible with his utilitarian highest use principle according to which natural resources could be used to obtain the greatest good to the greatest number of people. However, Muir was sharply against the project for he was valuing nature for its spiritual qualities more than its serving as resource for humans, and he argued that construction of the dam was no different than destruction of the holiest "temple has ever been consecrated by the heart of man" (1997, p. 817).

4.1.3. Callicott's Hesitancy about Leopold's Preservationism or Conservationism

What is the position of Leopold related with this distinction? Was he conservationist or preservationist? Were his views closer to Pinchot or Muir? As it is known, environmentalist philosophers are divided into various factions among themselves depending on various conceptions they endorsed. This has been the case almost since the inception of environmentalist movement. Moreover, environmentalist philosophers are not in agreement even about classification of earlier environmental philosophers with respect to various factions in environmentalist movement. Leopold is one of those environmental philosophers whose position with respect to some key concepts of environmental philosophy is not settled yet. Views differ about his position related with various conceptual distinctions in environmental philosophy. In the previous chapters, I tried to indicate that, Leopold is a man of practical wisdom, who tries to find a middle way between opposing extremes, or who seeks for reconciliation between opposing poles. Thus he is not inclined to draw sharp, rigid and insurmountable borders between opposing concepts, either. Hence I have argued in Chapter 2 that Leopold was closer to a tempered or weak anthropocentrist world view rather than an outright nonanthropocentrist one. And in Chapter 3, I speculated that Leopold might not argue against those who want to attribute intrinsic value to nature and its constituents, although he does not state intrinsic value at all in his works and he argues against attribution of special value even to human beings. He forcefully suggests a wide variety of actual and potential instrumental values of nature to motivate variety

of human beings for conservation, but he might not object people who might be moved by a different kind of value which does not exist in his list of values of nature. Then what is his position about this third distinction between "preservation" and "conservation?"

As I stated earlier, Callicott is the most ardent follower and most devoted interpreter of Leopold and of his land ethic. He believes that Leopold values natural entities predominantly intrinsically and that he was nonanthropocentrist rather than anthropocentrist. If we grant Callicott's interpretation of Leopold and the conceptual analysis made by Passmore, then we should admit that Leopold was preservationist rather than conservationist. But Callicott argues somewhat hesitantly and ambiguously.

For instance, in his "Whither Conservation Ethics?" Callicott argues that "preserve" in Leopold's oft-quoted maxim might be misleading:

> The word *preserve* in Leopold's … famous summary moral maxim – "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community; it is wrong when it tends otherwise" – is unfortunate because it seems to ally Leopold and the land ethic with the preservationists in the century-old preservation versus conservation conflict. We tend to think of Leopold as having begun his career in the latter camp and gradually come over, armed with new arguments, to the former. But Leopold was from first to last committed as much to active land management as to passive preservation. … Leopold's vision went beyond the *either* efficiently develop *or* lock up and reserve dilemma of the modern conservation *problematique*. Indeed, Leopold himself was primarily concerned, on the ground as well as in theory, with integrating an optimal mix of wildlife … with human habitation and economic exploitation of land (Callicott, 1999i, p. 328, Callicott's emphases).

Callicott's this evaluation deserves a closer look.

1. First of all, we had better not to take "preserve" in Leopold's moral maxim as "preserve" *sensu* Muir, or *sensu* Passmore. In other words, Leopold should not be seen in the preservationists' camp.
2. Some readers of Leopold might mistakenly consider that Leopold has undergone a transition from resource conservationism to nature preservationism. But this is not the case. Rather he was always "committed to *active* land management [and] *passive* preservation" (Callicott, 1999i, p. 328, emphases added). So he was always ["from first to last" (p. 328)] closer to conservationism than to preservationism.

3. Nevertheless, he was not committed to Muirean preservationism, as he was not committed to Pinchotian resourcism nor utilitarianism. Rather he surpassed these two futile visions and suggested a middle ground which aims at harmonizing wildlife with "human habitation and economic exploitation of land" (p. 328).

What does what Callicott says amount to, if not a shy utterance of Leopold's weak anthropocentrism, and conservationism, even if somewhat tempered one as compared to that of Pinchot? Indeed, as he later more openly (but still hesitantly) speaks out, the present circumstances in the world makes us to espouse conservationism, and weak anthropocentrism, as the inescapable and plausible way.

> The pressure of growing human numbers and rapid development, especially in the Third World, implies, I think, that a global conservation strategy focused primarily on "wilderness" preservation and the establishment of nature reserves represents a holding action at best – and a losing proposition at last. I support wilderness and nature reserves – categorically – with my purse as well as my pen. But faced with the sobering realities of the coming century, the only viable philosophy of conservation is, I submit, a generalized version of Leopold's vision of a mutually beneficial and enhancing integration of the human economy with the economy of nature – *in addition to* holding on to as much untrammeled wilderness as we can (p. 329, Callicott's emphasis).

Thus Callicott, even if hopelessly continues to support wilderness preservation, he submits that conservationism is "the only *viable* philosophy" roots of which can be found in Leopold's [weak anthropocentric] land ethic, or in Callicott's words, in "Leopold's vision of a mutually *beneficial* and enhancing *integration of the human economy with the economy of nature*" (p. 329, emphases added). Needless to say, this integration may, at times, if not frequently, tend to harm "the integrity, stability, and beauty of the biotic community." But rather than stringently clinging to the maxim, which is "a losing proposition at last," we had better develop ways which allow for "growing human numbers and rapid development" and which harmoniously integrate "the human economy with the economy of nature" (p.329). So, "faced with the sobering realities," Callicott concedes that conservation is the only viable and practicable alternative. Indeed, there does not seem even theoretical support for the policies of preservation which insist on exclusion of human beings from natural reserves:

> Lack of theoretical justification complements the present sheer impracticability of conserving biodiversity solely by excluding man and his works. Change – not only evolutionary change, but climatic, successional, seasonal, and stochastic change – is natural … And "man" is a part of nature. Therefore, it will no longer do to say, simply, that what existed before the agricultural-industrial variety of Homo sapiens evolved or

> arrived, as the case may be, is the ecological norm in comparison with which all anthropogenic modifications are degradations. To define environmental quality – the integrity, stability, and beauty of the biotic community – dynamically and positively, not statically and negatively, is part of the intellectual challenge that contemporary conservation biology confronts (p. 329).

First I should pay tribute to Callicott for his above words. I tried to show in the second chapter that Leopold's maxim has symbolic value which aims at awakening and encouraging us about environmental problems we are faced with, and that his overall philosophy does not require us stringently to obey his moral maxim. For otherwise, land ethic would sound impracticable for many human beings, who are accustomed to the conveniences provided by the technological development which have been reached in the course of history, to realize. Now, Callicott expresses my point much more elegantly than I did. Thus we are not required by Leopold's land ethic to turn back to pre-agricultural or pre-industrial era, as some may mistakenly suppose. Even if we accept that all anthropogenic modifications harmed nature, Leopold's land ethic does not suggest us pursuing a primitive life as an ecological norm. We should not restrain ourselves with "static and negative" interpretation of the moral maxim of Leopold's land ethic. Rather we should try to grasp its spirit "dynamically and positively" to find practicable ways to harmonize life of ourselves with as much diverse, healthy, and beautiful a nature as possible.

Callicott seems to express his belief for a conservationist philosophy more clearly, though still trying to be cautious, as follows:

> Certainly I am not here urging an unregenerate return to the economic determinism of the resource conservation ethic. Rather, I am simply pointing out that it is often possible for *people to make a good living* – and in some instances, *even the best living to be had – coexisting with* rather than converting the *indigenous biotic community*. And I am urging that *we strive to reconcile and integrate human economic activities with biological conservation*. Expressed in the vernacular, I am urging that we think in terms of "win-win" rather than "zero-sum." Further, I would like explicitly to state – and thereby invite critical discussion of – Leopold's more *heretical*, from the preservationist point of view, implied corollary *proposition*, viz., that human economic activities may not only coexist with healthy ecosystems, but that they may actually enhance them (p. 330, emphases added).

Callicott wants to make us sure that his return "certainly" is not as swift as to go back to resource conservation ethic of Pinchot. But it is no more a nonanthropocentric preservation ethic, either. He manifestly suggests a reconciliation, like Leopold often does, of a "good living," if possible "even the best living [no doubt for human beings] to be had," together with a diverse and healthy nature. For those who may insist on the preservationist philosophy, Callicott

suggests being less orthodox and not overlooking the positive examples of human intervention to improve the health of nature. But it would not be an unfounded conjecture to say that Callicott is no more urging (even an unorthodox version of) preservationism as a viable and practicable philosophy, after having been aware of the "sobering realities."

In another article, Callicott argues that Leopold, at times, especially more in his youth, inclined toward preservationist philosophy.

> Leopold bought into the wilderness *myth*. Indeed, he was one of the most outspoken advocates of wilderness preservation and one of the architects of the North American wilderness movement. Nevertheless, unlike a Muir or a Murie, he devoted himself primarily to the conservation of humanly occupied and used ecosystems – "a more important and complex task," as he put it (Callicott, 1999h, p. 344, quoted by Callicott, emphasis added).

Thus Callicott seems to imply that Leopold has believed, for a while, in the "myth" of wilderness preservation. But this inclination did not make him espouse preservationist philosophy in the degree that Muir endorsed it. I do not agree with Callicott's first assertion. As I indicated in the third chapter, Leopold advocated for the protection of the last remnants of wilderness due to their recreational or scientific values. Nevertheless, firstly, he was keenly aware of the fact that it was almost inevitable that wilderness areas, little by little, would wither away. Secondly, he was advocating for the protection of wilderness for the satisfaction of human recreational, cultural, scientific, aesthetic, etc., purposes. It is interesting to see that Callicott was trying to bolster conservationist philosophy by drawing attention to Leopold's earlier "inclination" toward the protection of wilderness. However, Leopold's advocacy for protection of wilderness does not show that he was a preservationist. For he advocated this for various human satisfactions. But, in the end, we see once more that Callicott approves, both for himself and Leopold, though somewhat unfairly through misinterpretation of Leopold's earlier works, conservationist philosophy as opposed to preservationist one:

> I can say with assurance … that neither manipulative management nor economic development are incompatible, in principle, with Leopold's general concept of land health. Human economic activities and the presence of domestic or exotic species are not inconsistent with land health, as Leopold conceived it, *provided that they do not disrupt ecosystem functions* (Callicott, 1999h, pp. 344-345, Callicott's emphasis).

I totally agree, including the added emphasis by Callicott. But if we, human beings, are allowed to manipulate and continue to develop our economy, even if these human activities "do not

disrupt ecosystem functions," then land ethic, both Leopold and Callicott versions, acknowledges that human beings have somewhat privileged status as compared to other members of biotic community.

Callicott and Eric T. Freyfogle coedited *For the Health of the Land* in which they brought together Leopold's some published and unpublished works written between 1932 and 1945. In addition, they contributed to this important volume by jointly writing an interpretive introduction. They make a conceptual distinction between preservation and conservation there. However, they, at times, prefer to use "nature preservation" for "preservation" and "resource conservation" for "conservation." Furthermore, interestingly enough, they frequently use "preservation" and "conservation" interchangeably, even in the passages in which they argue the distinction between "preservation" and "conservation." As we will see later in this chapter, Leopold, too, uses these two terms interchangeably. But again as we will see when we go into textual analysis of Leopold's own works, Leopold does not make a conceptual distinction between preservation and conservation. Callicott and Freyfogle, however, by using these terms interchangeably, seem to make us think that these two terms might be used instead of each other, as Leopold did, but these terms might refer to different senses depending on the context they are used. Thus, it is possible to use "conservation" but to mean "nature preservation." Or similarly, it is possible to use "preservation" but to mean "resource conservation." Although this latter form of use of the term is less frequent, there are instances Leopold uses "preservation" to mean "resource conservation."[41] So we should be cautious about the context where these two terms are used, and we should be aware of the conceptual distinction depending on the context they are used.

Callicott and Freyfogle seem to believe that Leopold had nature preservation rather than resource conservation, and intrinsic value rather than instrumental value in mind, even during the times when he seemed to endorse Pinchot's utilitarian "wise use" or "highest use" principle. But as we will see later, they are not so decisive in their conviction.

---

[41] Cf. Leopold 1921, pp. 78-80 where Leopold argues for preservation of some patches of wilderness for recreational use of people, and 1939b, p. 271 and 1966, p. 258 where he argues for preservation of some seemingly useless species for their probable use value.

They distinguish the concept of nature preservation from that of resource conservation by referring to Pinchot and Muir who are accepted as fathers of "conservationism" and "preservationism" respectively.

> As a student at the Yale Forest School (founded with Pinchot family funds) and later as a young ranger in the Forest Service (first headed by Pinchot himself), Leopold was thoroughly steeped in Pinchot's utilitarian philosophy of *resource conservation*. Its motto was "wise use" … its maxim was "the greatest good of the greatest number for the longest time."
>
> … *Nature preservation* was vigorously championed by … John Muir. Most *preservationists* thought that Nature (with a capital *N*) was sacred. To *conserve* nature was to protect it from human interference. Whereas *resource conservation* implied "wise use," or well-managed exploitation of natural resources, *nature preservation* implied the setting aside … of land and the prohibition of all extractive or consumptive uses, especially in the country's most majestic natural places (Callicott and Freyfogle, 1999a, pp. 14-15, emphases added).

Notice how Callicott and Freyfogle describe "preservation:" "To conserve nature was to protect it from human interference." Needless to say, "conserve" in this statement is used to mean "preserve" like in the sense of "preservationism" distinguished by Passmore as opposed to the sense of "[resource] conservationism."

As we will see in subsequent pages, Leopold uses the terms "conservation" and "preservation" interchangeably. He generally prefers using the term "conservation" rather than "preservation," though. Although Leopold, at the outset, keenly defends Pinchotian "highest use" principle, he has gradually changed or revised his views about this principle. However, Callicott and Freyfogle do not agree with such an approach. In their view, Leopold was always preservationist even if he seemed to speak in Pinchotian spirit:

> As he was … still in the employ of the Forest Service, Leopold carefully cast his essentially *preservationist program in the rhetoric of resource conservation*. Being essentially sacred spaces, the national parks were appropriately off-limits to hunting. But wilderness preserves in the national forests, Leopold argued, should still be understood as working, productive lands. Recreation (mainly hunting) was the "highest use" of those hitherto unexploited areas in the national forests that were to poor, too remote, or too rugged for profitable logging or grazing. Game, and such intangible goods as sport and primitive forms of travel, thus became for Leopold the forest and range "products" of designated wilderness areas in the national forests. It was an argument very much in the Pinchot spirit. But between the lines, one senses – *unstated yet unmistakably present* – the conviction that wildlands have intrinsic value and deserve preservation for their own sake (Callicott and Freyfogle, 1999a, pp. 15-16, emphases added).

Thus Callicott and Freyfogle warn us that we should not be deceived by Leopold's words which seem to echo those of Pinchot. Even if they seem to repeat Pinchotian utilitarian and conservationist views, they are preservationist in essence, and between the lines one can see attribution of "unstated yet unmistakably present" intrinsic value to nature and its members (p. 16).

Before showing counter evidences against Callicott and Freyfogle's depiction of Leopold from Leopold's own works, I want to draw attention to some parts in Callicott and Freyfogle's interpretation. First, they need to underline some "personal" circumstances Leopold were in. To see this, we should not overlook the parenthetical remarks that Callicott and Freyfogle make above. They draw our attention to the fact that Leopold, first, was a student at a school "founded with Pinchot family funds," and then became a forester in the Forest Service which was "first headed by Pinchot himself" (p. 14). Thus it is *understandable* that young Leopold might have been influenced from Pinchot's thoughts, and endorsed Pinchot's utilitarian conservation policies. But this was not the actual case according to the analysis of Callicott and Freyfogle. Because "[t]he true story … is more complex" (p. 16). Thus, Leopold's approving words about Pinchot's doctrine and conservation policies should have been only due to Leopold's feeling of indebtedness; they were just expressions of politeness or words of respect to Pinchot. However, Leopold was, in essence, always closer to preservationism. The policies he advocated and pursued might seem somewhat "conservationist," but, in fact, they were not so. Because he "cast his essentially preservationist program in the rhetoric of resource conservation" (p. 14). Nevertheless, he had to take up a duty in a place where neither Pinchot paradigm [resource conservation] nor Muir paradigm [nature preservation] was satisfactorily applicable. So he decided to apply a "third conservation paradigm," in this particular place. Callicott and Freyfogle explain why the generally received view that Leopold has undergone a transition from conservationism to preservationism might be wrong, as follows.

> Leopold is therefore often seen as a *conservationist* who began his career in the Pinchot camp and gradually came over to the Muir camp. *The true story, however, is more complex.* … [T]he Midwest to which Leopold returned in the 1920s lacked extensive public lands and national park grandeur. The great pineries of Michigan and Wisconsin had long been felled. The great prairies of Illinois and Iowa had long been plowed and planted to annual grains. Except for the Quetico-Superior Boundary Waters, little wilderness was left to preserve. The landscape had been largely carved up into privately owned smallholds (Callicott and Freyfogle, 1999a, p. 16, emphases added).

Hence the circumstances, according to Callicott and Freyfogle, were not appropriate, for Leopold, to apply conservationism of Pinchot or preservationism of Muir: "How could a *conservationist* apply either the Pinchot paradigm or the Muir paradigm in this kind of country" (p. 16, emphasis added)? Thus, in their view, Leopold decided to go his own way:

> Conventional agronomy in the Midwest was devoted to the efficient exploitation of land, and it was to the *conservation challenge* posed by such exploitation that Leopold turned his attention and his sensibilities soon after his arrival there. Something was plainly missing in the hardworking farm landscape that surrounded his new hometown. Big wilderness was out of the question; so was big-scale forestry. What did seem possible, Leopold decided, was the integration of a degree of wildness into the working landscape mosaic of cultivated fields, pastures, woodlots, and wetlands (pp. 16-17).

Therefore Leopold could not have pursued for resource conservation in a place where "big-scale forestry" was "out of the question" (p. 16). Nor could he have hoped to realize Nature preservation in a place where wilderness areas were too little to preserve. Indeed, it is possible to see in Leopold's works, how he variously described and named his own way which was different than that of Pinchot and Muir.

> But what to call this *third conservation paradigm*, this middle ground between unsullied wilderness and unrestrained exploitation? In time, Leopold would give it various names: a "harmony between men and land," "a mixture of beauty and utility," "the principle of wholeness in the farm landscape," "a state of health in the land organism," and finally and most simply, "land-health" (Callicott and Freyfogle, 1999a, p. 17, emphases added).

In fact, the conclusion that Callicott and Freyfogle have come at last is almost the same with what Callicott said in 1999i, namely, that Leopold wanted to reconcile "human habitation and economic exploitation of land" with "an optimal mix of wildlife" (1999i, p. 328). But interestingly, Callicott argued there that it was wrong to ally Leopold with preservationists for he "unfortunately" used "preserve" in his moral maxim, and that he "was from first to last committed as much to active land management as to passive preservation" (p. 328). On the other hand, according to Callicott and Freyfogle, due to the circumstances he were in, Leopold was seen to endorse Pinchotian conservationist policies, at the outset. But Leopold was, at heart, a preservationist, even then.

Nevertheless, following words by Callicott and Freyfogle make that conviction upside down once more:

> The unifying thread through Leopold's intellectual odyssey, from resourcism (Pinchot's philosophy) toward preservationism (Muir's philosophy) to his own harmony-with-nature philosophy, is Leopold's interest in game (Callicott and Freyfogle, 1999a, p. 17).

They said, however, a few paragraphs earlier, that "Leopold carefully cast his essentially preservationist program in the rhetoric of resource conservation," and that it would be wrong to assume that Leopold was "a conservationist who began his career in the Pinchot camp and gradually came over to the Muir camp" (pp. 15-16). But, in the above quote, they tell us that Leopold, "through [his] intellectual odyssey," has undergone a transition "from resourcism … toward preservationism" (p. 17). Not only this, they further state as follows:

> To Leopold, … conservation was practically synonymous with making sure that sport hunters would forever enjoy plentiful game.
>
> Pinchot's philosophy … provided the youthful Leopold with a model for scientific game management. Midway through his tenure in the Southwest, Leopold cast his first formal game-management essay in just this Pinchovian [*sic*] paradigm of conservation … Indeed, so enthralled was Leopold at this point with Pinchot's philosophy that he could essay to debunk the "popular wilderness fallacy" – the "fallacy that with the rapid reduction of wilderness to fair farms, ranches, and productive forests, game would grow scarcer (pp. 17-18).

This manifestly negates what they said earlier. So Leopold was conservationist, at least, at the outset of his career, for sure. Indeed, how could one, to whom conservation means providing sufficient game for hunters, or who was charmed by Pinchot's philosophy and applied this philosophy as a model for game management, be preservationist? This final assertion is more consistent with what Callicott said earlier. That is to say, we should not "ally Leopold and the land ethic with the preservationists" (Callicott, 1999i, p. 328). And we should keep in mind that "Leopold was from first to last committed as much to active land management as to passive preservation" (p. 328).

As a result, we had better ignore Callicott's hesitancy about whether Leopold was preservationist or conservationist at the outset. And we had better assume that Callicott's final position about Leopold is that he (Leopold), consistently through his whole career, has endorsed a middle way between conservationism of Pinchot and preservationism of Muir. And, as Callicott declares, we should not take "preserve" in the moral maxim of Leopold as if he advocated for preservationism.

4.2. Leopold's Position in His Early Works

Keeping in mind Callicott's (and Freyfogle's) observation that Leopold applied a third paradigm between resourcism of Pinchot and preservationism of Muir, let us go into times when Leopold began his career as a forester and what Leopold said about thoughts and policies of Pinchot, and scrutinize Leopold's "earlier" works.

4.2.1. Leopold as Game and Land Manager, and Lover of both Nature and Progress

At the outset, we see Leopold as a keen and devoted defender of game and land management. In his view, for instance, predatory animals, or varmints, as Leopold says, which "eat the cream off the stock grower's profits" and decrease the game supply, could be freely killed through "a practical, vigorous and comprehensive plan of action" (Leopold, 1915, pp. 47-48).

Furthermore, Leopold at the beginning of his career strongly believes in human progress, and considers that scientific and technological development contributes to the flourishing of wild life more than it harms. Although it is an undeniable fact that some human intervention might have an immense harmful impact on wild life, it might lead to flourishing of wild beings as well. For instance, men might destroy the living environment of many wildfowl by artificially draining marshes and lakes. On the other hand, however, men are building many lakes which later might become suitable habitats for wildfowl. "In the end," Leopold says, "we will probably give the wildfowl as many waters as we are taking from them" (Leopold, 1918a, p. 50). By means of technological progress, "[m]illions of acres of 'dry range' –waterless deserts almost devoid of life– are being made usable for stock, and incidentally, for game. … Under the influence of man [fires] are approaching zero. … The time will come when there will be much less destruction by fires than took place before the coming of the white man" (pp. 50-51). Although there is some evidence which shows that human intervention results in propagation of some diseases in wild animals, there is no need to worry about this. Because "[m]an is to an increasing degree able to check the ravages of natural epidemic among game. … Some day civilization will prevent more diseases of wild life than it introduced" (p. 51).

For youthful Leopold of 1918, technological development need not harm wild life, rather human development could promote wild life, and wild beings could harmoniously live with humans without being alienated to human environment:

> [A] great and ever-increasing area of game range has been actually occupied by railroads, dwellings, and cities. … But our native birds, at least, have readily adapted themselves to the new conditions. Dozens of species like the chimney swift, the house finch, and the eastern robin now actually prefer the haunts of man. … Who shall say that a square mile of suburban dwellings modern methods of bird feeding and housing, cannot raise more wild life, though of a partly different kind, than the original wilderness (p. 51)?

Leopold makes undoubtedly explicit his unqualified trust in human progress with following words. For him, "[p]rogress is no longer an excuse for the destruction of our native animals and birds, but on the contrary implies not only an obligation, but an opportunity for their perpetuation" (p. 52).[42]

Is it possible to observe any sense of "preservationist program" that is carefully cast "in the rhetoric of resource conservation" in above passages cited, as Callicott and Freyfogle suggested? No, these are manifestly Pinchotian views not disguised in any program whatsoever which urges the preservation of wilderness for its own sake. For Leopold, "preservation" of some "interesting species is good business" (1918b, p. 59). We should not exterminate these "interesting species." However, we are expected to "preserve" them not for the sake of the species in question, but for

[42] Although Leopold later revised or tempered his unqualified trust for industrial progress that he manifestly stated in his earlier works, he had never thought that scientific and technological progress as the enemy of conservation, unlike some present conservationists do. In "The Land Ethic" he says the following:

> We are remodeling the Alhambra with a steam-shovel, and we are proud of our yardage. We shall hardly relinquish the shovel, which after all has many good points, but we are in need of gentler and more objective criteria for its successful use (1966, pp. 263-64, cf. 1933b, p. 185).

Furthermore, in "Wilderness" he says:

> For the first time in the history of the human species, two changes are now impending. One is the exhaustion of wilderness in the more habitable portions of the globe. The other is the world-wide hybridization of cultures through modern transport and industrialization. Neither can be prevented, and *perhaps should not be*, but the question arises whether, by some slight amelioration of the impending changes, certain values can be preserved that would otherwise be lost (1966, p. 264, emphasis added).

So, presumably we cannot prevent exhaustion of wilderness in areas human industry has feasible access. And we cannot prevent global hybridization (globalization if you like) of human cultures via development in transportation and other technological innovations. We, conservationists, should not try to prevent them, either (for they are inevitable, perhaps). Rather we should try to find ways to preserve some values (e.g., patches of wilderness, recreational or aesthetic value of wildlife), which might be lost irrevocably, which these impending changes could lead to.

“their extermination … would be a sin against future generations” (p. 59). Leopold felt free himself to manage the game and the land in any way which he thought possible, provided that this management strategy principally favored human interests. And in his view, “highest use” principle of Pinchot was so important that he pointed out that it “is and must remain the guiding principle by which democracies handle their natural resources” (1921, p. 78).

4.2.2. Leopold’s Revision of Pinchot’s Principle of Highest Use

Although Leopold endorsed, at the outset of his career, Pinchot’s utilitarian approach and his doctrine of the highest use, he later needed to introduce some provisos. However, we still do not see the emergence of “preservationist program” after this gradual change or revision.

> Pinchot’s promise of development has been made good. The process must, of course, continue indefinitely. But it has already gone far enough to raise the question of whether the policy of development (construed in the narrower sense of industrial development) should continue to govern in absolutely every instance, or whether the principle of highest use does not itself demand that representative portions of some forests be preserved as wilderness (Leopold, 1921, p. 78).
>
> ...
>
> The argument for such wilderness areas is premised wholly on highest recreational use. The recreational desires and needs of the public, whom the forests must serve, vary greatly with the individual. Heretofore we have been inclined to assume that our recreational development policy must be based on the desires and needs of the majority only. … The majority undoubtedly want all the automobile roads, summer hotels, graded trails, and other modern conveniences that we can give them. … But a very substantial minority, I think, want just the opposite. It should be decided, as soon as the existence of the demand can be indefinitely determined, to provide what this minority wants. In fact, if we can foresee the demand, and make provision for it in advance, it will save much cash and hard feelings. It will be much easier to keep wilderness areas than to create them (pp. 79-80).

Thus, although Leopold does not speak against Pinchot’s doctrine or against industrial development in principle, he needs to underline some points. First, Leopold warns us that we should be cautious about the effects of “the policy of development.” We should not readily allow industrial ends overwhelm every instance of our lives. Secondly, we should be aware of the fact that Pinchot’s doctrine of highest use does not bar “preservation” of some forest areas as wilderness. For “highest use” need not only mean collecting “capital value” of natural resources for industrial purposes, but it also means obtaining “recreational value” to satisfy “recreational desires and needs of the public.” Moreover, while observing recreational needs of the public by

"preservation" of some areas as wilderness, desires and demands of minority should not be sacrificed to those of majority, in the case of conflict. In other words, Leopold tries to interpret Pinchot's utilitarian doctrine from a broader perspective in order to make a much wider room for conservation without losing his reconciliatory mood. We should note, however, in his effort to make room for conservation, out of a utilitarian doctrine, Leopold consistently refers to human interests. For instance, he says that "the forests must serve" the recreational desires and needs of the public. Furthermore, he points out that we should observe the desires and demands of minority also, not only to meet the needs of them, but also to "save much cash and hard feelings." For to preserve some forest areas as wilderness will serve the overall human interests in the long run. Thus Leopold, in an era in which progress was an ideal with no rivals, tries to reconcile the demands of industrial development with those of conservation. Perhaps his heart belongs to the purposes of conservation, but he was aware that realizing the ends of conservation would be a pious hope without taking into account the demands of existing tendency of human development. So, in order to get positive results, he believes that reconciliation is the remedy. As he points out in the name of foresters, "[i]t is the fundamental function of foresters to reconcile … conflicts [between preservation and use] and to give constructive direction to these issues as they arise" (p. 79). Therefore, he suggests preserving some forest areas as wilderness without harming industrial development. He invites people to question whether the doctrine of the highest use already demands that some forest areas ought to be preserved as wilderness. He wants to satisfy the recreational needs of the majority ("the greatest good to the greatest number") without harming the needs of the "substantial" minority. Although he welcomes the criterion of "the greatest good to the greatest number" as "the guiding principle by which democracies handle their natural resources," he also rightly points out that a good democracy should not overlook the needs and demands of minority.[43]

---

[43] This view of Leopold that wilderness should be "preserved" in accordance not only with the taste of majority, who want to have easy, safe and comfortable access to wild life, but also with all various population groups in the human community is repeated in the *Almanac,* as well:

> The value of recreation is not a matter of ciphers. Recreation is valuable in proportion to the intensity of experiences, and to the degree to which it *differs from* and *contrasts with* workaday life. By these criteria, mechanized outings [motorboat instead of canoe, car instead of horse] are at best a milk-and-water affair.

4.2.3. Industrial Progress vs. Wild life, and Reconciliation

As we have seen, the proviso that Leopold introduced to the "highest use" aims at preserving the interests of some minority who would like to enjoy recreational value of wilderness in its pristine state rather than preserving wilderness for its own sake. Furthermore, Leopold still looks for a way to reconcile demands of industrial progress with conserving some patches of wilderness to satisfy the recreational needs of people. For instance, he was quite generous to satisfy the needs of industry while he was positing the conditions to call a portion of area as wilderness.

> First, such wilderness areas should occupy only a small fraction of the total National Forest area. … Second, *only areas naturally difficult of ordinary industrial development should be chosen*. Third, each area should be representative of some type of country of distinctive recreational value, or afford some distinctive type of outdoor life, opportunity for which might disappear on other forest lands open to industrial development (1921, p. 79, emphases added).

Needless to say, all the conditions stated above are quite human centered, and strongly take care of demands of industrial development and of humans in general. There is no sense which makes us think that the "small fraction" of area is to be preserved for the sake of itself. These areas could be "preserved" only if they are not suitable for industrial development and if they provide "distinctive recreational value" or "distinctive type of outdoor life" which may not be obtained in somewhere else. Furthermore, if the above three conditions are tried to be satisfied, we would be submitting forests, little by little, to industrial development.

> It is obvious to everyone who knows the National Forests that even with intensive future development, there will be a decreasing but inexhaustible number of small patches of rough country which will remain practically in wilderness condition. It is also generally recognized that these small patches have a high and increasing recreational value. … *These patches are too small, and must grow smaller*. They will always be big enough for camping but they will tend to grow too small for a real wilderness trip. The man who wants a wilderness trip wants not only scenery, hunting, fishing, isolation, etc. … but also the horses, packing, riding, daily movement, and

---

> Mechanized recreation already has seized nine-tenths of the woods and mountains; a decent respect for minorities should dedicate the other tenth to wilderness (1966, p. 272, Leopold's emphases).

Thus recreational value of wilderness for people is intimately linked with their subjective experiences with nature. Hence, Leopold argues that some wilderness areas should be "preserved" as they are for some "substantial minority" who would like to enjoy wilderness in its full bloom of wildness.

> variety found only in a trip through a big stretch of wild country (p. 80, emphases added).

But we may hope that some portions would naturally remain wild even in the future. Because, presumably they would hardly be suitable for industrial purposes. However, we should accept the fact that the area of wilderness that we enjoy to satisfy our various recreational needs "must grow smaller" day by day. Is there anything in these words which favor preservation for the sake of nature and its constituents rather than satisfaction of human interests? The value attributed to wilderness and natural entities are instrumental and human centered. And it is an inescapable fact that most of the areas will be devoured for industrial purposes and that we will have to be contented with the rest to satisfy our recreational needs.

We have seen above that Leopold tries to interpret Pinchot's utilitarian doctrine of highest use in a broader perspective so that the interests of some substantial minority would not be overlooked. In the following words, he seems to enlarge this perspective to involve some form of pluralism, so that various needs of people in various fields will be satisfied as much as possible.

> It may also be asked whether the National Parks from which, let us hope, industrial development will continue to be excluded, do not fill the public demand here discussed. They do, in part. But hunting is not and should not be allowed within the Parks. Moreover, the Parks are being networked with roads and trails as rapidly as possible. This is right and proper. The Parks merely prove again that *the recreational needs and desires of the public vary through a wide range of individual tastes, all of which should be met in due proportion to the number of individuals in each class. There is only one question involved – highest use. And we are beginning to see that highest use is a very varied use, required a very varied administration, in the recreational as well as in the industrial field* (p. 80, emphases added).

Thus, at the present situation, Leopold might only hope that industrial development would not devour the last remnants of wild life which will serve to satisfy recreational needs of human beings. Nevertheless, recreational needs and desires of humans vary greatly. In order to satisfy utilitarian doctrine of Pinchot, "which is and must remain the guiding principle by which democracies handle their natural resources," Leopold suggested revising and broadening our perspectives. First, we need to classify various groups according to their tastes of recreation. Second, we should determine the proportion of each class in the general human population. And then we should try to meet the needs and desires of these classes "in due proportion to the number of individuals in each class." Only after we do these classifications and calculations properly, we can achieve "highest use," both "in the recreational as well as in the industrial

field.” Then we need to satisfy both the demands of industrialists of various sort and the recreational needs and demands of various people according to their tastes and their proportion in the general human population. And the “very varied administration,” that Leopold suggests, promises to satisfy all these plethora of, and presumably often conflicting, needs and demands of various kinds of human beings.

4.2.4. Destruction and Spiritual Value of Wilderness, and Leopold’s Recognition That Reconciliation Is on a Knife-Edge.

However, in “The River of the Mother of God” Leopold seems alarmed about the future of wild life:

> Is it possible to *preserve* the element of Unknown Places [wilderness] in our National life? Is it practicable to do so? I say “yes” to both questions. But we must act vigorously and quickly, before the remaining bits of wilderness have disappeared (1924c, p. 125, emphasis added).

This occurs after six years that he stated his unqualified trust for human progress that it would perpetuate rather than destroy wild life, and after three years he introduced some provisos to highest use principle of Pinchot (cf. 1918a, pp. 51-52; 1921, pp. 78-80).

Thus Leopold needs to urge policy makers that a policy of government which aims at preserving wilderness “would not subtract even a fraction of one per cent from our economic wealth, but would *preserve* a fraction of what has … been wealth to the human spirit” (1924c, p. 125, emphasis added). There is no doubt that a change is observable in Leopold’s mood. But could Leopold have meant “preservation” rather than “conservation” here? Or could he have had intrinsic value of wilderness in mind? Presumably, he did not. For he does not talk about preserving wilderness for its own sake or for its intrinsic value. He just wants to warn policy makers to take practical measures in order to save something which is important for their “National life” and for the satisfaction of “human spirit.”

In the subsequent pages Leopold makes more explicit his views about “preservation” of wilderness.

> I am pointing out that in this headlong stampede for speed and ciphers we are crushing the last remnants of something that ought to be *preserved for the spiritual and physical welfare of future Americans*, even at the cost of acquiring a few less millions of wealth

> or population in the long run. Something that has helped build the race for such innumerable centuries that we may logically suppose it will help *preserve it in the centuries to come* (p. 127, emphases added).

Thus we are urged, by Leopold, for preserving the last remnants of wild life. Why should we preserve them? The answer of Leopold is quite plain: to save "the spiritual and physical welfare of future Americans." For Leopold this, i.e., "spiritual and physical welfare of future generations," is more important than acquiring more wealth, or having greater growth rates. This is of course might be seen as a new step by which Leopold takes toward his conception of land ethic and by which he just begins to go away from Pinchotian version of highest use. On the other hand, however, we should not miss the point that the reasons put before us, by Leopold, to "preserve" nature, are all human oriented. We are required to "preserve" nature for the sake of "the spiritual and physical welfare of future generations," or we are required to conserve it for the continuance of human race.

What makes Leopold so alarmed, just after a few years he declared his trust for the harmony between industrial development and wild life? Although he earlier admitted that wild areas "must grow smaller," he did not thought that tendency of human development would be that much brutal, blind and deaf in devouring the land. He realizes in torment and shock that "these little patches [were] being wiped out at a rate which [took] one's breath away" (1925a, p. 129).

But perhaps it would be more proper to say that he was bewildered rather than being shocked. For he is still very cautious, but hesitant, while expressing his thoughts about the effects of human development on wild life. On the one hand he complains that "the motor car and the motor highway" destroy wild life (p. 129). On the other hand, however, he says, somewhat reluctantly that:

> We are building good roads to give the rancher access to the city, which is good, to give the city dweller access to recreation in the forests and mountains, which is good, but we now … are thrusting more and ever more roads into every little remaining patch of wilderness, which in many cases is sheer stupidity. For by so doing we are cutting off, irrevocably and forever, our national contact with the Covered Wagon days (p. 130).

Thus, Leopold is not against building roads. Building roads is good, as far as these roads serve city dwellers to comfortably reach wild areas to satisfy their recreational needs, or as far as these roads make ranchers' arrival to the city easier. What is not good, building them in excessive amount, so that last remnants of wild life are being wiped out.

Perhaps, what Leopold says is understandable to some extent. For he lived in an era where industrial progress or the "ideal" of mastery of nature were much more favored than "preserving" nature. Perhaps what he could do was to look for a compromise between the very much received industrialism and the necessity of "preserving" some patches of wild life. Perhaps, this was the only practicable way that he could see for the moment. But he had begun to see, perhaps, that reconciliation alone would not do.

Nevertheless, his main motivations, to "preserve" wild life, were predominantly human interests (cultural values, recreational satisfactions, concern for future generations). Indeed, Leopold utters his above worries about the destruction of wilderness in "Conserving the Covered Wagon," where he beautifully expresses his sentimental yearning for "the covered wagon days" when Americans still could enjoy wilderness in full satisfaction to which they reach together with their family members and friends by the covered wagons.[44] There are many instances, both in early works and, as we will see, in later ones, which show that Leopold always had in mind human interests while trying to realize his conservation ideals. Furthermore, Leopold often refers to human interests as a normative element to stimulate people for conservation purposes. For instance to motivate his fellow citizens Leopold frequently appeals to certain traditional values of American way of life. He argues that Americans, i.e., city dwellers, have an inner desire to flee the city. The roots of that desire which makes them strive for wild life goes back to pioneering days:

---

[44] Leopold still believed in Pinchot's utilitarian principle of highest use in the time he wrote this article. He approvingly quotes following passage from a speech of the Chief Forester of the day, Colonel William B. Greely. From that speech we understand that "highest use" was a rule which predominated US policies in general. Moreover, we understand that the argument to "preserve" nature for the sake of posterity was a typical one in the days of Leopold, as it still is.

> The law laid down for the guidance of the Forest Service was that these public properties must be administered for the greatest good of the greatest number in the long run. When Secretary Wilson laid down that rule, probably he was thinking more of timber and water and forage than anything else, but today the same rule applies just as clearly as it did in the time of Roosevelt in 1905. I think we can all agree that the greatest good of the greatest number of American citizens in the long run does require that in their own National Forests there should be preserved some bits of unspoiled wilderness where the young America of the future can take to the outdoors in the right way (Quoted in Leopold, 1925a, p. 131).

> We do not realize how many Americans have an instinctive craving for the wilderness life, or how valuable to the nation has been their opportunity of exercising that instinct, because up to this time the opportunity has been automatically supplied (p. 129).

In the same work he points out that well-to-do sportsmen have the chance to enjoy fruits of wilderness by going to "Alaska, or British Columbia, or Africa, or Siberia." However, "[t]he American of moderate means cannot go to Alaska, or Africa, or British Columbia. He must seek his big adventure in the nearby wilderness, or go without it" (p. 130). Hence, in order to satisfy the recreational needs of many Americans, who could not afford a far trip, we had better "preserve" existing nearby wilderness areas. As we have seen above, although Leopold rightfully complained that "the motor car and the motor highway" was wiping out the last remnants of wilderness, he favored building roads "to give the city dweller access to recreation in the forests and mountains" (p. 130). That is to say, wilderness was wanted to be "preserved" for the satisfaction of human needs. And the building of roads was allowed in order to make human satisfaction easier, even though the roads were destroying wilderness.

Nevertheless, Leopold had begun to realize that seeking for a compromise between industrial development and conservation was to be on a knife-edge. Indeed at the end of the article Leopold makes his case clearer; and having seen some shortcomings of reconciliatory approach, he leans more toward conservation side.

> What I mean is this: The Forest Service will naturally select for wilderness playgrounds the roughest areas and those poorest from the economic standpoint. But it will be physically impossible to find any area which does not embrace some economic values. Sooner or later some private interest will wish to develop these values. … And forthwith the private interests will invoke the aid of the steam roller. They always do. And unless the wilderness idea represents the mandate of an organized, fighting and voting body of far-seeing Americans, the steam roller will win (p. 132).

As we have seen above, Leopold listed the conditions of calling and "preserving" an area as wilderness in Leopold 1921. According to the second of these conditions, "only areas naturally difficult of ordinary industrial development should be chosen" as areas of wilderness (Leopold, 1921, p. 79). However, now, Leopold seems to recognize that one could not save some wild area by just calling it out as area of wilderness and by accepting second condition in advance. For any area might "embrace some economic values." And, some day in the future, some private interest, being armed with some new machines, might wish to extract that economic value from the area once upon a time called area of wilderness. And, unfortunately, that wish would not conflict with

Leopold's second condition cited above. Therefore, reconciliation, at least reconciliation alone, could not always work. Leopold seems to recognize that something else, and more, is needed, for instance, "an organized, fighting and voting body of far-seeing Americans."[45]

Needless to say, above words reflect some mood of change in Leopold's attitude. He suggests taking a definite position against the tendency of industrial development rather than simply trying to compromise with it. As compared to Leopold 1921, he sharpens his tongue and invites conservationists to fight against "the steam roller." His first move is to suggest some policy changes, and to force the government to enact some laws which secure the last remnants of wilderness:[46]

> At the present moment, the most needed move is to secure recognition of the need for a Wilderness Area Policy … for the express purpose of coördinating [*sic*] the many conflicting recreational interests which have arisen in recent years. If the spirit of the Covered Wagon ["instinctive craving for the wilderness life"] really persists, as I firmly believe it does, its devotees must speak now, or forever hold their peace (1925a, p. 132).

Consequently, to underline once more, first, Leopold seems to revise his tolerant attitude toward industrial development. He seems to recognize impossibility of "preserving" a wild area by making an odd compromise so that wild areas will be "preserved" only if these areas are not suitable for industrial usage. Thus, he suggests conservationists to unite. He recommends new policies and urges some legal measures. However, we should not miss the point that human interests are still at the center of his concern in his quest for "preserving" wilderness.

4.2.5. From "Highest Use" to "Good Balance"

In another article written again in 1925, "Wilderness as a Form of Land Use," Leopold makes explicit his case that "preservation" of wilderness is needed for the satisfaction of various human interests and that Pinchot's principle of "highest use" is the criterion which determines the limits for the use of wilderness in accordance with human interests. According to Leopold, "wilderness

---

[45] However, this does not mean that Leopold gave up seeking reconciliation. As we have seen in previous chapters, and as we will see in subsequent pages, reconciliation, or trying to establish a balance between opposing tendencies, is one of the key characteristics of Leopold's land ethic. For instance, establishing harmony between utility and beauty of the land is a recurring theme through whole oeuvre of Leopold (cf. e.g., 1933b, p. 191; 1935a, p. 212; 1935b, p. 218; 1939b, p. 271; 1945, p. 326).

[46] He would say later, however, that obligations make no sense unless there were no ecological conscience (1966, p. 246, and 1947b, p. 341).

is a resource" (1925c, p. 135). First, it is a resource which provides various raw materials to be exploited through industrial purposes. Second, it is a resource, "in the sense of a distinctive environment which may … yield certain social values" (p. 135). Furthermore, in his view, "wilderness exists in all degrees, … [it] is a relative condition. … [I]t must be a flexible thing, accommodating itself to other forms and blending with them in that highly localized give-and-take scheme of land-planning which employs the criterion of highest use (pp. 135-36). Therefore, Leopold still has highest use doctrine of Pinchot in mind, but in a revised form. Thus, wilderness is a resource which would be exploited, within somewhat broadened limits of that principle, that is, by as many people as possible including "substantial minority," and in as much prolonged time as possible.

In the same work Leopold suggests another perspective to land use. According to Leopold, wilderness areas should be "preserved" in a balanced system. He suggests the good old rule of means as a form of land use. "A study of the history of land utilization shows that good use is largely a matter of good balance – of wise adjustment between opposing tendencies" (p. 136).[47] In other words, we will not forget the double aspect of wilderness as a resource, namely economic and social use values that wilderness promises, and try to obtain a "good balance" between the two.

> To preserve any land in a wild condition is, of course, a reversal of economic tendency, but that fact alone should not condemn the proposal. A study of the history of land utilization shows that good use is largely a matter of good balance – of wise adjustment between opposing tendencies. The modern movements toward diversified crops and live stock on the farm, conservation of eroding soils, forestry, range management, game management, public parks – all these are attempts to balance opposing tendencies that have swung out of counterpoise.
>
> One noteworthy thing about good balance is the nature of the opposing tendencies. In its more utilitarian aspect, as seen in modern agriculture, the needed adjustment is between economic uses. But in the public park movement the adjustment is between an economic use, on the one hand, and a purely social use on the other (pp. 136-137).

Hence what Leopold approves is not crude utilitarian "highest use" principle anymore, unlike which is practiced in modern agriculture. But rather he suggests a balanced system of land use according to which, while utilizing the land, first, demands of minority would also be taken into

[47] As it is known, application of the rule of means goes back to Aristotle (cf. Aristotle, 2002, Book II.6-II.9, 1106a14-1109b27.

account, and second, a balance or harmony between economic and social values of the land would be obtained.

What we have so far shows, contrary to Callicott and Freyfogle's (1999a) interpretation, by and large, that Leopold was closer to conservationism, *sensu* Pinchot, or *sensu* Passmore. In his view, we should "preserve" nature for the better satisfaction of human interests, rather than for its own sake. He did not hesitate to state that nature was a resource to be exploited. He, at first, endorsed Pinchot's principle of highest use as a form of use which "is and must remain the guiding principle by which democracies handle their natural resources." Later he tried to broaden the perspective of the principle. First he introduced the proviso of preserving the rights of minority. Secondly, in "Wilderness as a Form of Land Use," he also introduced the rule of means. This principle seems compatible with his oft-repeated aim of establishing harmony between utility and beauty of the land. Although he thought, at the outset, that it was possible to reconcile industrial development with conservation objectives, he later understood (after observing the rate and harshness of industrial development) that he could not rely on reconciliation alone to save the last remnants of wild life. However, although he realized the malicious power of industry, and leaned toward conservation more, he never gave up his reconciliatory mood. Harmony, reconciliation, or balance between "opposing tendencies" is a recurring theme in Leopold's ethical conception.

4.3. Leopold as a Sportsman and "Intergrade" and His Conception of Conservation as a Whole

In his later works Leopold frequently argues the necessity of observing the balance or harmony between economical and social aspects of the land, or as he often prefers, between utility and beauty of the land. He severely criticizes land use practices which take into account only economics, or which produce a single species by exterminating many native species, as it is done in agriculture, or which increase the population of a favorite game by ignoring others, and so on. In his view, conservation practices should be carried out in a broader or holistic perspective, by which economical, recreational, cultural and social concerns of humans are all taken into account.

4.3.1. Leopold's Love for Hunting, and Game Management as a Part of Conservation

As it is known, Leopold has always been fond of hunting. In Leopold's view, hunting is not only an instinctual affair to satisfy the need for meat, but more than that, it eventually has become a cultural and social affair which satisfy recreational needs of humans.

At the beginnings of his career Leopold spent much effort to maintain a game population sufficient for the enjoyment of sportsmen. He did not hesitate to lead game management practices through which many predators were killed in order to promote game population. Nevertheless, he later recognized that these kinds of conservation practices were "lop-sided" and were not sustainable. However, he has never thought that game and land management, nor hunting should be given up.[48] For the former are necessary practices of human land use provided that they were carried out in a holistic perspective; and the latter was a characteristic of being a "pioneer," a symbol of having an "instinctive craving for the wilderness life" (Leopold, 1925a, p.129).

According to Leopold, conservation practices which do not take land as a whole, in a balanced and harmonious system of use, are not sustainable; they would lead to problems in the long run. For instance, in relation with game management Leopold says the following:

> In the long run lop-sided programs dealing with game only, songbirds only, or fish only, will fail because they cost too much, use up too much energy in friction, and lack sufficient volume of support. … [S]portsmen must recognize *conservation as one integral whole, of which game restoration is only a part* (1930, p. 154, emphasis added).[49]

---

[48] Although Leopold was principally against the import of exotic species into a habitat, or artificial game cropping, he accepted import of, e.g., Chukars, provided that a careful research had been done before the import. He accepted this, because there were not sufficient amount of native birds to shoot (1938a, p. 246).

Furthermore, in "Goose Music" he points out that hunting is so important not only for himself but also for many Americans and human race:

> The point is that some six or eight millions of Americans like to hunt and fish, that the hunting fever is endemic in the race, that the race is benefited by any incentive to get out into the open, and is being injured by the destruction of the incentive in this case. To combat [wildlife] destruction is therefore a social issue (1966, pp. 232-33).

[49] In "Biotic Land-Use," too, Leopold defines management as part of conservation: "MANAGEMENT is conserving particular plants or animals by keeping the land favorable (1942c, p. 199).

In other words, sportsmen should be aware of the fact that game management policies which try to favor a special game species which sportsmen like most are not sustainable. Conservation practices should be carried out in a perspective to protect whole land together with game, plants, other animals, soil, water, etc.

4.3.2. What Does It Mean To Be an "Intergrade?"

Leopold's insistence on game management practices and his love of hunting had severe criticisms, not only recently from animal liberationists, but also from some preservationists in the past. For instance an ornithologist of his time, T. T. McCabe blamed Leopold's views on game management as a "framework of pernicious doctrines" (Quoted in Leopold, 1932a, p. 164).

As a response to McCabe, Leopold provides us a remarkable hint about his position in the "conservation" vs. "preservation" controversy. We should not fail to notice the name of the article, as well: "Game and Wild Life Conservation." Were the name "Game and Wild Life Management," presumably no one would be bewildered. Leopold says:

> Mr. McCabe's attitude raises what seems to me a fundamental issue. I hope that it may provoke some badly needed cerebration among both *protectionists and sportsmen*, and especially among those *intergrades* like myself, *who share the aspirations of both* (1932a, p. 164, emphases added).

Therefore, Leopold determines his position neither as a thorough (or blind) protectionist nor as a happy-go-lucky sportsman but in between the two: an intergrade. He does not suggest hunting unconsciously without taking care of long term outcomes of irresponsible hunting. That is why, he warns both the public and the government to do something to take necessary measures. However, he is more concerned with the interests of humans than the interests of other species. He wants to preserve wild life to preserve the interests of human beings both in the present and in the future. For him, hunting is a part of human culture, and there is no need to give it up unless it endangers long term interests of human beings.

In fact, both Leopold and McCabe were ornithologists (Leopold, 1932a, p. 164, editors' note). Leopold draws attention to the fact that for many humans who try to make a living through variety of professions, protection or preservation, presumably even conservation, is not an

essential concern. A conservationist who does not take into account this bitter fact may often be disappointed.

> Mr. McCabe's game policy … consists of a system of *personal wishes* which might be realized if America consisted of 120 million ornithologists, whereas mine is a system of *proposed public actions* designed to fit the unpleasant fact that America consists largely of businessmen, farmers, and Rotarians, busily playing the national game of economic expansion. Most of them admit that birds, trees, and flowers are nice to have around, but few of them would admit that the present "depression" in waterfowl is more important than the one in banks, or that the status of blue goose has more bearing on the cultural feature of America than the price of U.S. Steel (p. 165, Leopold's emphases).

Above quotation makes clearer Leopold's position as an "intergrade." He is a proponent of "a system of *proposed public actions*" as opposed to "a system of *personal wishes.*" The former is more practical, more realistic, it was "designed to fit" to the wishes of most of the American people, not all of whom were committed nature protectionists. Therefore, a system which only takes care of the wishes of some minority would not work. For it could not get sufficient support which it needs for the realization of its hopes. Thus, Leopold seems to endorse a more realistic, public opinion based, result oriented, in short more pragmatist an attitude in order to solve environmental problems. And his attitude was strongly shaped in accordance with human interests.

Furthermore, in Leopold's view, to insist on a stringent preservation policy is never practicable and does not comport with existing conditions of the world:

> I realize that every time I turn on an electric light, or ride on a Pullman, or pocket the unearned increment on a stock, or a bond, or a piece of real estate, I am "selling out" to the enemies of conservation. When I submit these thoughts to a printing press, I am helping cut down the woods. When I pour cream in my coffee, I am helping to drain a marsh for cows to graze, and to exterminate the birds of Brazil. When I go birding or hunting in my Ford, I am devastating an oil field, and re-electing an imperialist to get me rubber. Nay more: when I father more than two children I am creating an insatiable need for more printing presses, more cows, more coffee, more oil, and more rubber, to supply which more birds, more trees, and more flowers will either be killed, or … evicted from their several environments (p. 165).

In other words, if we accept preaching of protectionists (preservationists, if you like) we should completely change our ways of life. But is this what Leopold suggests? In his view, we have two alternatives. "One is to go live on locusts in the wilderness" (p. 165). This is what Muir did, and what we have to do, if we agree with protectionists, or if we do not want to sell out to the "enemies of conservation" (p. 165). However, Leopold did not expect each of us to be a Muir or

a Thoreau, which is practically impossible. So he suggests another alternative: “surreptitiously to set up within the economic Juggernaut certain new cogs and wheels whereby the residual love of nature … may be made to recreate at least a fraction of those values which their love of ‘progress’ is destroying” (p. 166). Perhaps this is a more practicable way for most of the human population. We, those who have to live within the economic Juggernaut, or in the cities away from wild nature, still can do something to prevent destruction of “progress” lovers or “enemies of conservation;” even if we fill the pockets of enemies of conservation at the same time.

In fact, Leopold did both, and as an intergrade he mostly followed a middle way. That is to say, sometimes he pursued a life like that Muir did, and sometimes he had to sell out to the enemies as most of us do. But mostly he struggled against the destruction of nature in a practicable, realistic way. Only after three years he wrote above words, he acquired the Wisconsin River farm and lived there with his family. But he never gave up the other course, and tried “to set up within the economic Juggernaut certain new cogs and wheels” (p. 166). He wanted to “preserve” the remnants of wild life wherever and whenever this was possible. However, he believed that this should have been done within the limits of existing social order and way of life, of plethora of attitudes of various people. He has never given up seeking to establish a balance or reconciliation among different viewpoints in conservationist movement, when it is possible, in order to attain a positive result to restore nature:

> I am conceited enough to believe that the formula my little group [of game management] is trying to put together comes as near meeting the *ugly realities of economics* on the one hand, and the *ideals of the protectionists* on the other, as yet any devised (p. 168, emphases added).

Therefore, as an “intergrade,” Leopold cautiously distinguishes his position and demarcate himself both from unqualified progress lovers and from utopian protectionists. He dares to face with existing situation and tries to develop practicable projects, and to apply them with every effort he can do. Admit it, or not, there is a social and economic order in which most of the people seem not to desire to act to save nature through restricting their comfort and way of life. However, it is a fact that existing order has a huge detrimental impact on nature, as well. Taking into account the tendency of destruction and hence the urgency of situation, those who really want to restore nature should devise methods and projects within the limits of existing situation before losing the last remnants of wildlife. But instead of going after a utopian, inapplicable, and

unrealizable policies, it is better to work on more realistic, practicable, result oriented projects. Instead of insisting on impracticable policies, sincere nature lovers should seek for convergence:

> I beg for a little selectivity in weighing the new departures proposed by the other fellow. I also pray for the day when some little group of protectionists will publicly avow their old formula of restriction [through laws] is not the whole Alpha-to-Omega of conservation.[50] With both sides in doubt as to the infallibility of their own past dogmas, we might actually hang together long enough to save some wild life. At present, we are getting good and ready to hang separately (p. 168).

Nevertheless, we should be aware of the fact that convergence is on the knife-edge. In order to "hang together," rather than "hanging separately," nature lovers should leave behind their prejudices, dogmas, if they really want to save nature.

Leopold's description of his position as an "intergrade" in "Game and Wild Life Conservation" confirms, in a sense, Callicott's (and Freyfogle's) interpretation that Leopold applied a third paradigm between resourcism of Pinchot and preservationism of Muir. But so far, we did not find any evidence which approves that Leopold cast a "preservationist program in the rhetoric of resource conservation." Nor was it possible for us to sense, "unstated yet unmistakably present" intrinsic value attribution to nature or to its constituents. And nor was it possible to infer from what Leopold says that nature should be preserved for its own sake rather than for the satisfaction of human interests, or for human welfare, or happiness. What we have so far, frankly, is that Leopold is closer to "conservation" than "preservation," *sensu* Passmore. Leopold revised and broadened Pinchot's highest use principle – i.e., he did not see nature only as economic value or utility, but also underlined its social, aesthetic and recreational values. Furthermore, he pointed out that tastes of various people ought to be respected and taken into account. But he predominantly had human interests and welfare in mind while he was suggesting conservation objectives and practices. If we can conceive nature lovers in a line that there is Muir and Pinchot on two ends, we can say that Leopold was somewhere in the middle and Pinchot rather than the other way around. That is to say, as a nature lover he was closer to "conservationism" than "preservationism," in the sense that Passmore distinguishes these concepts. Perhaps we can say on behalf of him that he defended "preservation" of nature for the

[50] As I indicated in footnote 46 above, Leopold later states that obligations do not make sense if there were no ecological conscience (1966, p. 246, and 1947b, p. 341). So, what he says here (in Leopold 1932a) is in parallel with what he says in "The Land Ethic."

sake of human beings rather than for the sake of nature itself. This was at least the case before 1933.[51]

4.4. Leopold's Conception of Conservation or Preservation in His Later Works

It is quite possible to find various revisions and modifications through the odyssey that Leopold had taken. One of the most dramatic revisions occurred in his ideas about predator control. At the beginnings of his career, as a game manager and lover of hunting, he eagerly defended eradication of some predators, in his words of varmints, in order to make possible a paradise of game for lovers of hunting in particular, and lovers of nature in general. However, as his ideas and knowledge about nature have evolved, he recognized that predators, like many seemingly useless natural beings, might have a critical role to sustain working of nature as a whole.

Nevertheless, it is possible to observe a great deal of constancy in the course of evolution of Leopold's ideas about conservation. For instance, he has always been fond of hunting. Moreover, he has always believed that population of some species could be managed to sustain the whole biota. On the other hand, he has always deeply felt the necessity of ethics and aesthetics, or philosophy, at least as much as science, in order to grasp and guide our relationships, interactions with nature. Furthermore, reconciliation, rather than strife was his main characteristic while he was postulating or trying to realize his ideas about conservation. And his scientific and philosophical quest about nature has always been backed by concern for human interests, for posterity, for human welfare or happiness.

I have been arguing through this dissertation that Leopold's views about conservation constitute a unity despite some revisions and modifications he has made while he was developing his land ethic. As to the subject matter of the present chapter, i.e., whether he was preservationist or conservationist, I feel safer to say that Leopold has made the least revision about his position as

---

[51] Interestingly enough, Callicott and Susan Flader refer to the same controversy between Leopold and McCabe. They describe McCabe as "a preservationist who damned Leopold ... for his apparent greater concern with producing game to shoot than preserving wildlife for its own sake." And they say for Leopold that he "poignantly and pointedly defended the purity of his personal ends" (Flader and Callicott, 1991b, p. 19). I agree. But due to this agreement, hence due to Leopold's "poignant and pointed" defense of his position as a man of practical wisdom, or "intergrade," I am not able to agree with Callicott and Freyfogle's contention that Leopold cast "a preservationist program in the rhetoric of resource conservation."

an “intergrade.” Thus let us continue to trace the evolution of Leopold’s land ethic to see whether he has changed his position between Pinchot and Muir continuum.

Leopold declared his position as an intergrade in 1932. Hence he did not blindly go after utopian thoughts of protectionists, nor did he think that nature was just a resource to be exploited for economic purposes only. As he said in “Game and Wild Life Conservation,” as an intergrade, he endorsed the aspirations of both protectionists (i.e., wild life species should be protected as much as possible) and sportsmen (i.e., wild life serves for the satisfaction of human interests).

The *Almanac*, posthumously published masterpiece of Leopold, and especially the capstone essay “The Land Ethic” in this work, is generally accepted as the essence of Leopold’s land ethic. In environmental literature, references made to Leopold and his land ethic are mostly from this last work of Leopold. So, it would not be wrong to assume that “The Land Ethic” is the last point in the evolution of Leopold’s views about nature and “conservation” or “preservation” of it. However, it should be noted that both the *Almanac* and the capstone essay “The Land Ethic” in it involve many passages which are extensively incorporated, and at times verbatim, from earlier works, beginning from “Wilderness as a Form of Land Use” which was written in 1925.

“The Conservation Ethic” which was delivered as an address in 1933 is another work from which Leopold benefited while writing “The Land Ethic.” First three pages of “The Land Ethic,” where Leopold argues the possibility and necessity of a new stage, or a new ethic, in the evolutionary development of ethics, are taken almost verbatim from “The Conservation Ethic.” That is to say, “The Conservation Ethic” is the work where Leopold postulated the possibility and necessity of a new ethic for the first time even if he did not name it as the land ethic, yet (1933b, pp. 181-82, cf. 1966, pp. 237-39). Furthermore, in this work, Leopold demarcates and compares older and recent trends in conservation movement, and takes side on the new trend (1933b, p. 190).

Thus “The Conservation Ethic” seems as a good starting point to pursue Leopold’s conception of conservation in his later works. Indeed, in this work Leopold states his views about “conservation” which are in parallel both with the earlier works that we have seen above and the later ones.

4.4.1. Conservation as Harmony between Man and Land

Leopold points out in "The Conservation Ethic" that "[t]he conservation movement is, at the very least, an assertion that … interactions between man and land are too important to be left to chance (1933b, p. 185). Leopold later defines conservation, at least three times in different works, as "the state of harmony between men and land" (1939a, p. 255; 1966, pp. 189 and 243). Hence the important point which cannot be left to chance is the practice of conservation, interactions between us and the land. If the interactions between us, humans, and the land are in harmony, then we have conservation. As he says in another work, "[w]hen land does well for its owner, and the owner does well by his land; when both end up better by reason of their partnership, we have *conservation*. When one or the other grows poorer, we do not" (1939a, p. 255, emphasis added).

Thus conservation is the establishment of a harmonious relation between humans and the land. Harmony is attained through keeping the land in good condition, and as a result, through continuous satisfaction of human interests. It is a relation only human beings consciously establish.[52] Both the definition given above and the one repeated in "The Land Ethic," and the above depiction of conditions for the realization of conservation, are strongly human related. Even if it results in good of the land, motivation is mainly due to human good.

How can we save our relation with land, and make it harmonious? The remedy that Leopold suggests is establishing "a *universal symbiosis with land*, economic and esthetic, public and private" (1933b, p. 188, Leopold's emphasis). We presumably would be doing nothing wrong if we read "universal symbiosis" as "harmony." According to Leopold, symbioses were some modes of cooperation which evolve through interactions between individuals, between individuals and society, and finally between individuals and nature (1933b, p. 182, and 1966, p. 238). And modes of cooperations would constitute "the conservation ethic" or "the land ethic" which is the third stage in the evolutionary development of ethics to be attained. Thus conservation could only be possible by the conscious will and act of human beings. By starting conservation movement, human beings, at least some of them, asserted that establishing a harmonious relation between humans and land are vital for their own existence and good.

[52] As Leopold says later, "[c]onservation is the attempt to understand the interactions of … components of land, and to guide their collective behavior *under human dominance* (1942c, p. 199, emphasis added).

Again in "The Conservation Ethic," Leopold expresses his contentment, albeit somewhat vaguely, due to the trend of evolution that conservation movement has taken, and mentions some of the "interactions between man and land" which should not "be left to chance." He seems hopeful about future when he compares older conception of conservation with the recent one.

> The recent trend in wild life conservation shows the direction in which ideas are evolving. At the inception of the movement fifty years ago, its underlying thesis was to save species from extermination. The means to this end were a series of enactments. The duty of the individual was to cherish and extend these enactments, and to see that his neighbor obeyed them. The whole structure was negative and prohibitory. It assumed land to be a constant in the ecological equation. Gun-powder and blood-lust were the variables needing control.
>
> There is now being superimposed on this a positive and affirmatory ideology, the thesis of which is to prevent the deterioration of environment. The means to this end is research. The duty of the individual is to apply its findings to land, and to encourage his neighbor to do likewise. The soil and plant succession are recognized as the basic variables which determine plant and animal life, both wild and domesticated, and likewise the quality and quantity of human satisfactions to be derived. Gun-powder is relegated to the status of a tool for harvesting one of these satisfactions. Blood-lust is a source of motive-power, like sex in social organization. Only one constant is assumed, and that is common to both equations: the love of nature (Leopold, 1933b, p. 190).

There are a few important points here which are worth emphasizing. First of all, Leopold repeats some of his ideas expressed in "Game and Wild Life Conservation." As he said there, here too, he suggests policies which aim at protection of the whole land rather than the ones which try to save some species from extermination. Secondly, as opposed to the assumption of early conservation practices according to which land was something constant, something unchanging, Leopold declares that land can change, both positively and negatively. For it has been understood that there is a strong interdependence between the soil and the species which live on it. Therefore the new conservation movement, having understood this fact, would try to maintain a suitable soil and plant succession which determines the existence and the future of all species including plants, animals, and human beings. However, we should notice that Leopold does not take human beings on a par with other beings. He says that the proper "soil and plant succession determine plant and animal life" but introduces the proviso that "quality and quantity of human satisfactions" will be met. And finally, and interestingly enough, in the new era we are not expected to give up nor do we need to control using gun-powder or pursuing blood-lust. In a narrower perspective this might be explained by Leopold's love for hunting. But in a broader perspective, it might be seen as another confirmation which shows his concern for human interests. For he affirms use of gun-powder as "a tool for harvesting one of [the] satisfactions,"

no doubt, of human beings. Moreover, he affirms, somewhat vaguely and ambiguously, blood-lust as a motive power to realize human satisfactions. Blood-lust is not a motive peculiar to human beings only, and it does not always suggest constructive motive for conservation; but the mood of the passage makes us think that Leopold has human beings in mind.

4.4.2. Conservation as the Effort To Protect Our Benefits That We Get from Nature

We have pointed out above that Leopold defined conservation, several times, as harmony between man and land. In "Conservation Economics" Leopold gives another definition for conservation:

> We have gained an easier living, but in the process of getting it we are losing two things of possibly equal value: (1) The permanence of the resources whence comes our bread and butter; (2) the opportunity of personal contact with natural beauty.[53]
>
> Conservation is the effort to so use the whip that these two losses will be minimized (1934a, p. 193).

Thus, again, Leopold stresses value of nature as a means, or the role of nature as a necessary means for the satisfaction of human needs. While gaining some comfort, we risk, first, satisfaction of some primary needs, and secondly, the chance of enjoying natural beauties, especially, that of the future generations. And what conservation movement aims at is minimizing these essential losses. This description of conservation is obviously human oriented.

In "The Farmer as a Conservationist" Leopold gives another definition for conservation which is in the same mood with the one given above: "Conservation … is keeping the resource in working order, as well as preventing over-use. Resources may get out of order before they are exhausted, sometimes while they are still abundant" (1939a, p. 257). This definition, too, manifestly takes care of human needs and interests. Thus, in Leopold's view, we will keep exploiting the land as a resource, but we will not overexploit it. Why? Simply because this cannot be maintained in the long run, or it is not sustainable.

---

[53] As we have seen in Chapter 3, section 3.2, Leopold also stated in the *Almanac* that "[w]e seek contacts with nature because we derive pleasure from them" (1966, p. 283).

4.4.3. Conservation as "Preservation" of Utility and Beauty of Land

We should notice that description of conservation as harmony between man and land is a somewhat modified version of "good balance" that we have seen above, according to which, in our interactions with nature we would try to balance both economic value, or utility, and social, cultural, or aesthetic value of it (Leopold, 1925c, pp. 136-37). Leopold later revises "good balance" as "harmonious balanced system of land use:"

> There are two ways to apply conservation to land. One is to superimpose some particular practice upon the preexisting system of land-use, without regard to how it fits or what it does to or for other interests involved.
>
> The other is to reorganize and gear up the farming, forestry, game cropping, erosion control, scenery, or whatever values may be involved so that they collectively comprise a harmonious balanced system of land-use.
>
> Each of our conservation factions has heretofore been so glad to get any action at all on its own special interest that it has been anything but solicitous about what happened to the others. This kind of progress is probably better than none, but it savors too much of the planless exploitation it is intended to supersede (1935b, p. 218).

Needless to say, Leopold favors the second way, i.e., "a harmonious balanced system of land-use." And he has in mind the concept of land-use, and of game and land management, rather than "preservation" of the land for its own sake. And as I stated above, this is recurring through the whole oeuvre of Leopold, including "The Land Ethic." Thus, in his view, conservation can be achieved not by this or that particular practice, but by the harmonious and balanced combination of many of them. Only through this "harmonious and balanced system of land-use" can we meet the interests of all "conservation factions," in particular, and of human beings, in general. According to Leopold, "[t]he crux of the land problem is to show that integrated use is possible on private farms, and that such integration is mutually advantageous to both the owner and the public" (p. 219). In other words, through conservation, i.e., by "harmonious and balanced system of land-use" we are aiming at satisfying the interests of all human beings.

How can we establish a harmonious relation with land, if we cannot protect beauty of nature, while we are satisfying our primary needs? Beginning from "The Conservation Ethic" Leopold often emphasizes combination of utility and beauty of the land (1933b, p. 191). In fact, all these are different reflections of Leopold's search for reconciliation. Although he realized very early that trying to compromise with industrial progress is on the knife-edge, he has never given up

seeking reconciliation, whenever he thinks that this is possible. As we have seen earlier, reconciliation, or harmony, or establishing a balance between opposing tendencies is one of the key characteristics of Leopold's land ethic.

This perspective of conservation can be observed through the whole career of Leopold. For instance in "Land Pathology" Leopold describes conservation as "a protest against destructive land use [which] seeks to *preserve* both the utility and beauty of the landscape" (1935a, p. 212, emphasis added). Two conclusions can easily be drawn from this definition. First, conservationists protest destruction of land, as they do today. Second, they aim at "preserving" "both the utility and beauty of the landscape." Notice that Leopold uses "preserve" to define "conservation." Does this usage of the terms suffice to make him "preservationist?" Not in the least. For there is no mention or implication of preserving land or nature for its own sake, or for intrinsic value attributed to it. "Preservation" of utility and beauty of landscape is desired for the sake of ourselves, for the satisfaction of human needs.

Why do conservationists protest destruction of land? Do they primarily aim at their own good or the good of the land itself? Leopold often seems to lean toward human good. For instance, when he argues against violent or industrial farming he says the following:

> The fertile productive farm is regarded as a success, even though it has lost most of its native plants and animals. Conservation protests such a biased accounting. It was necessary, to be sure, to eliminate a few species, and to change radically the distribution of many. But it remains a fact that the average American township has lost a score of plants and animals through indifference for every one it has lost through necessity (1939a, p. 255).

Therefore, in Leopold's view, conservationists protest thorough commitment to fertile production on farms at the expense of native flora and fauna. That is to say, he considers that industrial farming, which promotes production of a species at the expense of many others, leads to destruction of the land in the long run. However, he says manifestly that he is not against increasing production through application of various instruments, even if this amounts to extermination of some species or radical redistribution of many. Rather he is against irresponsible, ruthless exploitation of land so that many native species are lost unnecessarily. Why could elimination of some species or radical redistribution of many be necessary, if not for the satisfaction of human interests? Leopold unwaveringly lets us apply land or game

management, even if these practices may lead to radical changes in distribution of various species or eradication of some of them, in order to meet our needs and interests.

Why should we, human beings in general, conservationists in particular, try to save various species many of which seem useless at the moment? Because we know, yet, very little about the complex land mechanism. So it would be unwise to discard "seemingly useless parts" on the basis of the information we have at the moment. Rather we had better protect "cogs and wheels" of the land mechanism which have been constituted "in the course of aeons" (Leopold, 1966, p. 190). Species that we thought to be useless at the moment can be proven to be useful in the future:

> The emergence of ecology has placed the economic biologist in a peculiar dilemma: with one hand he points out the accumulated findings of his search for utility, or lack of utility, in this or that species; with the other he lifts the veil from a biota so complex, so conditioned by interwoven cooperations and competitions, that no man can say where utility begins or ends. No species can be "rated" without the tongue in the cheek; the old categories of "useful" and "harmful" have validity only as conditioned by time, place, and circumstance. The only sure conclusion is that the *biota as a whole is useful*, and biota includes not only plants and animals, but soils and waters as well (Leopold, 1939b, pp. 266-67, emphasis added).
>
> …
>
> [I]ncredibly minute quantities of certain substances determine the value of soils to plants, of plants to animals. … What of the vanishing species, the preservation of which we now regard as an aesthetic luxury? They helped build the soil; in what unsuspected ways may they be essential to its maintenance? ... [W]e use prairie flowers to reflocculate the wasting soils of the dust bowl; who knows for what purpose cranes and condors, otters and grizzlies may some day be used (Leopold, 1939b, p. 271, and 1966, p. 258).

Or as he says in "The Round River:" "Some day we may need … prairie flora not only to look at but to rebuild the wasting soil of prairie farms. Many species may then be missing" (1966, p. 194).[54]

---

[54] E. O. Wilson, too, draws attention to some of our possible losses when species go extinct, as Leopold did:

> New sources of scientific information will be lost. Vast potential biological wealth will be destroyed. Still undeveloped medicines, crops, pharmaceuticals, timber, fibers, pulp, soil restoring vegetation, petroleum substitutes, and other products and amenities will never come to light. It is fashionable in some quarters to wave aside the small and obscure, the bugs and weeds, forgetting that an obscure moth from Latin America saved

Thus although Leopold talks about preservation of species, it is hardly possible to suppose that he means preservation for the sake of themselves or for their intrinsic value. We should try to preserve whole biota rather than this or that constituent of it. Because it is useful as a whole (1939b, p. 267). We should preserve all species irrespective of their apparent utility. Because they might be found out useful in the future.

In one of his latest works Leopold provides a summary of his conception of conservation including his recurring key concepts, such as reconciliation, harmonious balanced land use, harmony between utility and beauty, and his concern for human interests. Leopold points out that prevalent human land use, in fact, destabilizes the land by restricting the flora and the fauna of the land used in order to obtain salable products. In his view, this is not sustainable. It tends to deteriorate the land in the long run. Good land use has to take into account health or stability of the land, one of the marks of which is biodiversity. Leopold classifies "two opposing philosophies of farm life" as follows:

> 1. *The farm is a food-factory*, and the criterion of its success is salable products.
>
> 2. *The farm is a place to live*. The criterion of success is a harmonious balance between plants, animals, and people; between the domestic and wild; between utility and beauty (1945, p. 326, Leopold's emphases).

Although he puts these two approaches as opposing philosophies, and although he favors the second to the first, one should note that Leopold never loses his reconciliatory and realistic attitude. For the second does not reject or exclude the first one. Rather the second approach suggests a middle way according to which we would continue to harvest the utility of the land without losing its beauty. We will continue to produce "salable products," or domestic animals and plants, but we will not recklessly annihilate wild animals and plants. In short, second approach incorporates the first one in a broader perspective. Leopold does not talk about

---

Australia's pastureland from overgrowth by cactus, that the rosy periwinkle provided the cure for Hodgkin's disease and childhood lymphocytic leukemia, that the bark of the Pacific yew offers hope for victims of ovarian and breast cancer, that a chemical from the saliva of leeches dissolves blood clots during surgery, and so on down a roster already grown long and illustrious despite the limited research addressed to it. … Field studies show that as biodiversity is reduced, so is the quality of the services provided by ecosystems. … As extinction spreads, some of the lost forms prove to be keystone species, whose disappearance brings down other species and triggers a ripple effect through the demographies of the survivors. The loss of a keystone species is like a drill accidentally striking a powerline. It causes lights to go out all over (1992, pp. 347-48).

abandoning, or even limiting, human needs and interests, or radically changing our ways of life. He just wants to extend our universe and perspective so that we would not entrap ourselves to our egotistic interests only. But rather we will recognize that we are part of a much larger community without the stability of whole of which our survival, too, is under suspect in not too distant a future. He continues as follows:

> On the other hand, wildlife is an integral part of the farm-as-a-place-to-live. While *it must be subordinated to economic needs*, there is a deliberate effort to keep as rich a flora and fauna as possible, because *it is "nice to have around"* (p. 326, emphases added).

Hence Leopold stresses once more inevitability of observing human interests over wildlife. Wildlife is an integral part of the land as a whole, but "it *must be* subordinated to economic needs." We should try to preserve the biodiversity, because "it is nice to have" variety of beings around.

Finally, Leopold's hope for reconciliation between industrial progress and conservation of nature appears again in this work, but with some qualification with respect to the times he expressed unqualified trust to scientific and technological development.

> It was inevitable and no doubt desirable that the tremendous momentum of industrialization should have spread to farm life. … [H]owever it has overshot the mark, in the sense that it is generating new insecurities, economic and ecological, in place of those it was meant to abolish. In its extreme form, it is humanly desolate and economically unstable (p. 326).

Thus, industrialization in land use is not only inevitable but also desirable. Nevertheless, we should be able to control it so that we will not let it destabilize the community of which we are a part. Unless we succeed in controlling it we will see earlier or later that it will begin to harm our own interests severely.

In brief, we can safely say that Leopold's depiction of conservation as "preservation" of utility and beauty of the land does not imply preservation in the sense Passmore distinguishes it from conservation. Simply because "preservation" of land is favored for the sake of human interests rather than for the sake of nature or for its intrinsic value.

4.4.4. Conservation as the State of Health in the Land Organism

Leopold likes to play with terms and concepts, and constructing various analogies by using them. In the section "Wilderness" in the *Almanac*, many parts of which were incorporated from "Wilderness as a Land Laboratory" he likens agriculture to medicine, and conservation to public health. In his opinion, health is "[t]he most important characteristic of an organism" (1941b, p. 287, and 1966, p. 272). He defines health as the "capacity for internal self-renewal" (1941b, p.287). And since, in his view, the land as a whole is an organism, we can also talk about the health of the land which is the capacity of the land to renew itself.[55] As he summarizes in "The Land Ethic:"

> A land ethic … reflects the existence of an ecological conscience, and this in turn reflects a conviction of individual responsibility for the health of the land. Health is the capacity of the land for self-renewal. Conservation is our effort to understand and preserve this capacity (1966, p. 258).[56]

According to Leopold "[t]here are two organisms in which the unconscious automatic processes of self-renewal have been supplemented by conscious interference and control." The first is the human being whose health is to be protected through public health policies or through the intervention of medicine. The other is the land whose health is subject to conservation practices

---

[55] This is another recurring theme in Leopold's works. That is, land is an organism and land health is the capacity of land for self-renewal (cf. Leopold, 1923, pp. 94-95; 1934c, p. 209; 1935a, p. 212; 1942a, p. 300; 1942b, p. 303; 1944, pp. 310 and 318; 1947a, p. 336; 1966, pp. 190 and 258).

[56] In "Conservation: In Whole or In Part" Leopold says the following:

> The land consists of soil, water, plants, and animals, but health is more than a sufficiency of these components. It is a state of vigorous self-renewal in each of them, and in all collectively. Such collective functioning of interdependent parts for the maintenance of the whole is characteristic of an organism. In this sense land is an organism, and conservation deals with its functional integrity, or health (1944, p. 310).

This paragraph is almost completely parallel with the mood of "The Land Ethic." It points out that land is not only soil, but also water, plants, and animals, but furthermore it is an organism which is able to renew itself all together with its components so that it preserves its "functional integrity." Leopold earlier pointed out that land health means land stability (cf. 1941c, p. 194). Now he also says that land health means functional integrity of the land. If we think Leopold's dictum in "The Land Ethic" that "a thing is right when it tends to preserve the integrity, stability, and beauty of the land," we see that first two conditions (i.e. integrity and stability) of rightness are satisfied by the land health. Needless to say, a healthy land is also beautiful. In other words, it will not be wrong to say that according to Leopold's dictum "a thing is right when it tends to preserve the health of the land, it is wrong otherwise."

and agricultural applications (1941b, p. 287, and 1966, p. 272). And both the health of human being and the land "have been supplemented by conscious interference and control" of human beings. In this sense, agriculture and conservation are two means by which humans try to affect the health of the land, as medicine and public health affect the health of humans. We can infer from these analogies that Leopold favors public health and conservation, both of which have broader and holistic perspectives in overcoming health problems of human community and biotic community respectively, as opposed to medicine and agriculture which deals with the health problems of humans and the land somewhat more locally.

As we may understand the sickness of a human being from various symptoms, we can detect the land sickness as well. We know for instance that loss of fertility might be a symptom of land sickness. But what might lead to loss of fertility? For instance, soil erosion through abnormal floods or abnormal changes in water systems are well-known reasons which lead to land sickness. However, there are some recently discovered reasons, too:

> The disappearance of plant and animal species without visible causes despite efforts to protect them, and the irruption of others as pests, despite efforts to control them, must, in the absence of simpler explanations, be regarded as symptoms of derangement in the land-organism (Leopold, 1941b, p. 287, and 1966, pp. 272-73).

Thus if some organisms go extinct without an observable cause, or if some organisms populate abnormally, again without any known cause, we might talk about instability or sickness of the land. By irruption of plants and animals as pests, Leopold does not mean some unwanted weeds or insects only, but any plants and animals which overpopulate. For instance, in his view, irruption of deer in a certain area is also a conservation problem which should be resolved by human intervention, such as by killing (or culling) some of them or by introducing or increasing the population of some native predators (1946a, pp. 330-335, and 1947b, p. 342).[57]

---

[57] We see once more that Leopold has never rejected land and game management when he thought that this is necessary for the health of the land. For instance, in his address at the Midwest Wildlife Conference in December 1946, he defended the necessity of killing of deer, and severely criticized intellectuals who wrote against this policy. In his opinion, too much deer show pest behavior. Unless their population is controlled from outside, not only wildlife has been destroyed, but in the end they had to starve, for they could not find sufficient food. Therefore "[t]he remedy is to reduce females before starvation occurs" (Leopold, 1946a, p. 331).

> In 1943, after an educational campaign, the Commission opened the season on antlerless deer. 62,000 were killed, in addition to 66,000 bucks. There had been little

The motivation behind the analogy between public health and conservation, and medicine and agriculture should be that the former try to protect the health of the land or humans before they become sick, and the latter generally try to recover the sickness after symptoms emerge. Indeed, we usually use fertilizers when the fertility decreases, or use chemicals when we observe irruption of some unwanted species. But these symptomatic cures, though necessary, might not suffice to obtain the health of the land (Leopold, 1941b, p. 288, and 1966, p. 273). As we know, these are generally used agricultural practices. In this sense, agriculture has a much narrower perspective than conservation. According to Leopold, agriculture does nothing more than suggesting ways of killing insects and weeds by insecticides and herbicides. In his words, "[a]gricultural science is largely a race between the emergence of new pests and the emergence of new techniques for their control" (1939b, p. 269). If we really want to cure the problems of the land, however, we need to look from a broader perspective and we should care with the real causes of the problems rather than trying to relieve the symptoms.

However, not only agricultural practices are impotent to cure the land, many conservational practices, too, might be ineffective to recover the health of the land, like some public health applications are ineffective in preserving the health of human community.

> Many conservation treatments are obviously superficial. Flood control dams have no relation to the cause of floods. Check dams and terraces do not touch the cause of erosion. …
>
> … The practices we now call conservation are, to a large extent, local alleviations of biotic pain. They are necessary, but they must not be confused with cures. The art of land-doctoring is being practiced with vigor, but the science of land-health is a job for the future (Leopold, 1941b, p. 288, cf. 1966, pp. 273-74 almost verbatim).

Thus Leopold first distinguishes conservation practices from agricultural applications. For the latter could only get rid of some of the symptoms of the sickness of the land but mostly cannot cure the sicknesses. Moreover, although conservation has a broader perspective than agriculture, not every conservation practice is effective to preserve the health of the land. Some of them could only alleviate symptoms but were not able to heal the sickness. That is why Leopold needs to make distinctions among conservation practices and conservationists (see section 4.4.5 below). In this sense, "land-doctoring" – which reminds of witch-doctoring – are ineffective

---

> advance opposition, but on the day the "slaughter" started, Group 3 rose in wrath. It hasn't sat down yet (p. 332).

conservation practices which are not able to cure the land, as "flood control dams, check dams and terraces" might not be able to get rid of the problem of flood and erosion. While trying to find out the causes and proper cures of the land problems, ecology, "as the fusion point of sciences," or conservation, or "ecological conservation," as "the science of land health" will serve us as a "searchlight on [our] universe" (Leopold, 1939b, p. 273; 1944, p. 315; 1946b, p. 224; 1966, p. 261). Thus Leopold sees the remedy in the development of the new "science of land-health," by which he presumably has ecology which is guided by land ethic in mind.

In order to develop the science of land-health we will need laboratories as many sciences do. But artificial laboratories in universities and research centers which are very limited in size and capacity would not suffice to help flourish this new science. In order to detect the real causes of the sickness of the land we need at least some patches of land which do not suffer from instability. Leopold has two possibilities for this purpose in mind. One is the "northeastern Europe" which has not lost its stability in spite of human usage for centuries. Second is wilderness areas where humans have not intervened or deteriorated yet (Leopold, 1941b, p. 288, and 1966, p. 274). Since not everyone has an easy access to the former, we had better protect some areas of wilderness to benefit as the laboratory of new science. We need these areas, because they are exemplars of land which are able to maintain themselves without losing their fertilities and soil quality, and without human intervention. We should notice that preservation of wilderness is a means for the new science, in the narrower sense, but for maintaining the health of the land that we need in order to satisfy human interests, in the broader sense. As Leopold says, "[a]ll wilderness areas … have a large value to land-science. The important thing is to realize that recreation is not their only or even their principal utility (Leopold, 1941b, p. 289, and 1966, p. 276, almost verbatim). Thus, wilderness areas are valuable, not only for they provide us recreational facilities, but also for they serve as laboratories for the researches in order to understand the real causes behind land health and sickness. And, in Leopold's view, both recreational value and scientific value of wilderness are forms of utility.

We need to answer the following question now. In earlier three descriptions of conservation we have seen that Leopold has always tried to reconcile human needs with conservation objectives. So, by describing conservation as the state of land health, does Leopold revise his conception of "conservation" toward "preservation?" If we consider Passmore's distinction between conservation and preservation we can hardly say that Leopold underwent such a transition.

Because there is no evidence that he says or implies that health of the land is tried to be obtained for the sake of the land or for its intrinsic value. As we have seen, his concern for human interests always prevails over the interests of other beings. He does not hesitate to apply land and game management policies on behalf of human interests, even if these policies could harm various nonhuman species. Indeed, he puts this succinctly in another description that he gives for conservation: “Conservation means land-health as well as resource-supply” (1944, p. 318). Thus conservation in the sense that Leopold understands takes into account land-health and resource-supply together, both of which maintain the interests of human beings both in the short and long run. Moreover, Leopold points out that conservation practices should take into account health of the land, and human land use and needs together:

> [T]he basic premise of ecological conservation: the land should retain as much of its original membership as is compatible with human land-use. The land must of course be modified, but it should be modified as gently and as little as possible (1944, p. 315).
>
> Stable health was associated geologically with the full native community. … Impairments are coincident with subsequent changes in membership and distribution. The “inner workings” of land are not understood, but a causal relation between impairments and degree of change is probable. This leads to the rule-of-thumb that changes should be as gentle and as restrained as compatible with human needs (pp. 318-19).

As it is known, land-health or land stability has been impaired increasingly by anthropogenic intervention. On the other hand, however, Leopold acknowledges the necessity of human intervention on the land. We have to modify the land when we need to do this, both to satisfy our own needs and to keep the land healthy. What Leopold suggests is keeping this modification or intervention under control, and being as gentle as possible while we are intervening into the land mechanism.

In “Planning for Wildlife” Leopold manifestly declares that health or stability of land is necessary for human well-being:

> Stable (i.e. healthy) land is *essential to human welfare*. Therefore it is unwise to discard any part of the land-mechanism which can be kept in existence by care and forethought. These parts might later be found to contribute to the stability of land (1941c, p. 194, emphasis added).

Thus we should understand that a healthy, or stable, land is essential for our own survival. That is why we cannot recklessly destroy any constituent of the land. For the stability of the land-

mechanism, hence our own survival is not distinct from the health of some other part in the mechanism. A part of the mechanism which seems useless for the moment might later be proven to be indispensable for the stability of the whole mechanism, and for our survival.

4.4.5. Distinction between Conservationists and Conservation Practices

Although Leopold does not make a distinction between “preservation” and “conservation,” at least in the sense that Passmore makes, he does make some distinction between conservationists and conservation practices. His distinction between conservationists and conservation practices goes back to “The Conservation Ethic” where he compares older conservation practices with recent ones. As we have seen earlier, Leopold advocates, conservation practices which take the land or nature as a whole rather than those which try to save a part of it. He also points out in “Game and Wild Life Conservation” that he supports conservation policies which take care of the whole land, together with its soils, waters, plants and animals, rather than those which protect certain species. Nevertheless, although human beings are also part of the land, Leopold does not take them on a par with other components of the land. While suggesting various conservation practices, he is cautious to meet “quality and quantity of human satisfactions” (Leopold, 1933b, p. 190).

In one of his latest works, “Conservation: In Whole or In Part?” Leopold declares that “[t]here are two kinds of conservationists.”

> One kind feels a primary interest in some one aspect of land (such as soil, forestry, game or fish) with an incidental interest in the land as a whole.
>
> The other feels a primary interest in the land as a whole, with incidental interest in its component resources (1944, p. 310).

Needless to say, he is the advocate of the latter since he believes that every part of land has a function in maintaining the health of the land, and that true conservation could be possible only in a holistic manner without forgetting that land is more than economic resource to us.

In the same work he also introduces a new concept, namely “ecological conservation” or “conservation in the ecological sense,” the basic premise of which is that “the land should retain as much of its original membership as is compatible with human land-use” (p. 315). Thus ecological conservationists are aware that land is a whole, and that every part of land should be

given due care as much as “compatible with human land-use.” “Ecological conservation” is the alternative that Leopold puts against “lop-sided conservation” or conservation which promotes “one component at the expense of another” (p. 316).

Leopold continues to criticize conservation practices which concentrate only on economic interests, therefore “lop-sided,” in “The Land Ethic” also:

> [A] system of conservation based solely on economic self-interest is hopelessly lopsided. It tends to ignore, and thus eventually to eliminate, many elements in the land community that lack commercial value, but that are (as far as we know) essential to its healthy functioning. It assumes, falsely, I think, that the economic parts of the biotic clock will function without the uneconomic parts (1966, p. 251).

Thus he underlines once more that conservation policies should not rely on utility only. If a conservation policy rests on economic concerns only, it is not only lopsided, or unbalanced, but also hopeless. Why hopeless? Because we cannot go far with such a policy. If we ignore seemingly unprofitable components of the land, or worse, if we eradicate them, the land may begin to lose its health, it may begin to deteriorate. He does not say that economic concerns should be given up or ignored. He warns those people who concentrate only on commercial value of natural entities that the nature is an integrated whole, and that every part of it, whether profitable or economic, or seemingly uneconomic, might be essential to preserve the health of the land. And if we let “uneconomic” parts to degrade or exterminate lopsidedly, we might be exterminating not only these “uneconomic” parts but also economic ones, and hence ourselves, in the long run, like potato bugs which exterminate potato without knowing that they are exterminating themselves (Leopold, 1923, p. 97, and 1924c, p. 127).

In “The Ecological Conscience” Leopold criticizes some conservationists who advocate proliferation of deer population in forests for the sake of hunters or some humans who want to see deer alive.

> These people call themselves conservationists, and in one sense they are, for in the past we have pinned that label on anyone who loves wildlife, however blindly. These conservationists, for the sake of maintaining an abnormal and unnatural deer herd for a few more years, are willing to sacrifice the future forest, and also the ultimate welfare of the herd itself (1947b, p. 342).

Thus, according to Leopold, arguing for the existence of individual animals or any other nonhuman beings, without considering long term effects of such a policy, is wrong. Rather we

should aim at protecting the health of the whole land. Because the welfare of individuals could be possible together with the health or stability of the whole land.

> The basic fallacy in this kind of "conservation" is that it seeks to conserve one resource by destroying another. These "conservationists" are unable to see the land as a whole. They are unable to think in terms of community rather than group welfare, and in terms of the long as well as the short view. They are conserving what is important to them in the immediate future, and they are angry when told that this conflicts with what is important to the state as a whole in the long run (p. 342).

Let us consider deer example that Leopold often refers (cf. e.g., 1941c, p. 196; 1946a, p. 331; 1947b, p. 341). If deer were overpopulated in a habitat, and if there was no intervention to control their number, they would continuously propagate. But while they were propagating, they would seriously harm the nature they were in. And in the end, they would not be able to satisfy even their own need for food, and would begin to starve, and even die. However, if it was possible to draw their number to the carrying capacity of the habitat they were living, we would do less harm than we will be doing in the long run, both to the species and the whole habitat in overall. Nevertheless, we should notice that Leopold allows for modification or management of nonhuman species only. He never talks about culling of some human beings who are also part of nature, although he is well aware of the impact and overpopulation of human beings.[58] Moreover, he tries to support his conception of conservation by emphasizing benefit of the state. That is to say, by controlling population of deer, Leopold suggests, whole state, therefore human beings, would be benefited in the long run.

The subsection "Land-Health and the A-B Cleavage" in "The Land Ethic" illustrates best how Leopold distinguishes different kind of conservationists. Leopold classifies conservationists roughly in two groups:

> Conservationists are notorious for their dissensions. … [A] careful scrutiny reveals a single plane of cleavage common to many specialized fields. In each field one group (A) regards the land as soil, and its function as commodity-production; another group (B) regards the land as biota, and its function something broader. How much broader is admittedly in a state of doubt and confusion (1966, pp. 258-259).

---

[58]As we have seen in the second chapter, Leopold was also aware of the fact that humans have exceeded or approached their carrying capacity. But instead of culling, he suggests much more moderate measures for human beings (cf. Leopold, 1941a, p. 284).

Notice that both the members of group A and B are conservationists. But there is a significant difference. Group A deals mostly with the use value of nature, whereas Group B takes nature as a whole, and deals not only with the use value, but also with the health, and beauty, or aesthetics of nature. Members of Group A try to increase the production of natural entities, which are economically more valuable, such as various crops, “sport and meat” (p. 259). They seek to find artificial ways to produce them increasingly, without taking into consideration the long term effects of these practices on the health of the land. Furthermore, they may tend to ignore the derangement of natural beings which do not seem to promise economic beneficence in the short run. However, group B takes the land as a whole and every entity in nature as valuable irrespective of their visible utility. Members of group B value naturally reproduced plants and animals more than artificially propagated ones. However, they acknowledge that “the farmer, by the very nature of his techniques, must modify the biota more radically than the forester or wildlife manager” (p. 260). For they worry both on biotic and economic grounds simultaneously. Moreover, group B “worries about a whole series of secondary forest functions: wildlife, recreation, watersheds, wilderness areas” (p. 259). In short, main difference of Group B from Group A is that the former does not commit itself only to economic concerns but also aesthetic and ethical concerns of nature.

Finally, according to Leopold, A-B cleavage among conservationists reveals itself in various important paradoxes:

> In all of these cleavages, we see repeated the same basic paradoxes: man the conqueror *versus* man the biotic citizen; science the sharpener of his sword versus science the searchlight on his universe, land the slave and servant *versus* land the collective organism (pp. 260-261, Leopold’s emphases).

In Leopold’s view, as human ethics evolve through its third stage, and as more human beings accept responsibility for beings other than human beings, we will overcome these paradoxes. That is to say we will understand that nature is not something to be conquered, rather that it is something we should live in harmony with it. We will realize that science and technology are not our weapons to conquer nature, rather that they are our guides and means to understand it better. And finally we will understand that nature is not our slave or servant, but that we are part of it like animals, plants, soil and waters, and our real and sustainable welfare depends on the health of whole nature.

As a result, ecological conservation which takes nature as a whole organism as opposed to lop-sided conservation which try to save some parts of land at the expense of some others of course do have different connotations. But is it possible to say that the former refers to preservation and the latter to conservation in the sense that Passmore distinguishes these terms? I do not think that it is. For Leopold never forgets that nature is a resource for our own well being, that it has indispensable economic value for us. That is why he expects us to keep conservation practices in harmony with human land use practices. But unlike lop-sided conservation practices assume, we should keep in mind that land is a whole. We cannot keep it as a whole if we preserve only the components which promise profit in the short run. Long term health of the land might depend on parts of the land that seem useless to us at the moment. As Leopold says, economic parts of land cannot be harvested indefinitely, if we relentlessly remain blind to the eradication of the uneconomic parts (1966, p. 251). In short, Leopold's concern for conservation of nature as a whole does not stem from a conception of nonanthropocentrism or attribution of intrinsic value to nature. Rather it stems from his concern for human well being and happiness. He was well aware of the fact that human welfare is not possible in a nature which lost its health.

4.4.6. Some Ambiguous Usages of Preservation and Reasons for "Preservation"

We have seen that Leopold uses "preservation" and "conservation" interchangeably. He does not seem to make a conceptual distinction between these two terms. Furthermore, if we grant Passmore's distinction, it is hardly possible to call him a preservationist. First of all he does not seem to attribute intrinsic value to nature or its constituents. He never loses his concern about human needs and interests while he posits his ideas about conservation. In many passages where he uses "preserve," or "preservation," Leopold has preservation for the sake of human interests in mind.[59] For instance, he wants to preserve some remaining patches of wilderness areas in order to satisfy recreational needs of people in accordance with their taste, provided that these areas were not suitable for industrial purposes (cf. 1921, pp. 78-80). He defends that remaining patches of wilderness should be "preserved for the spiritual and physical welfare of future Americans" (1924c, p. 127). He argues that wilderness "can be preserved for the ends of sport" (1925c, p. 137, and cf. 1966, p. 269). Or he argues for "preservation of some tag-ends of

[59] For the passages where Leopold uses "preserve" but to mean "conserve" *sensu* Passmore, cf. Leopold 1921, pp. 78-79; 1924c, pp. 125 and 127; 1925c, pp. 136-38; 1935a, p. 212; 1939b, pp. 271 and 272; 1966, pp. 258, 264-65 and 269.

wilderness, as museum pieces, for the edification of those who may one day wish to see, feel, or study the origins of their cultural inheritance" (1966, pp. 264-65). In none of these Leopold advocates preservation of nature or its any constituent for itself. But there are also some passages where he uses "preserve" or "preservation" somewhat ambiguously. In the following subsection I will try to analyze important three of them.

4.4.6.1. What Does Leopold Mean by "Preservation?"

In "The Round River" Leopold asserts that the "first principle of conservation [is] to *preserve* all the parts of the land mechanism" (1966, p. 190, emphasis added). If preservation of all the parts of the land mechanism is the first principle of conservation, could Leopold have meant preservation of the whole land for its own sake by "conservation?" However, just before this assertion Leopold says the following:

> The outstanding scientific discovery of the twentieth century is not television, or radio, but rather the complexity of the land organism. Only those who know the most about it can appreciate how little is known about it. The last word in ignorance is the man who says of an animal or plant: 'What good is it?' If the land mechanism as a whole is good, then every part is good, whether we understand it or not. If the biota, in the course of aeons, has built something we like but do not understand, then who but a fool would discard *seemingly useless* parts? To keep every cog and wheel is the first precaution of intelligent tinkering (p. 190, emphasis added).

Thus Leopold emphasizes the probable utility of natural entities as he did in Leopold, 1939b, pp. 266-271, and 1966, pp. 194; 258. As we have seen in section 4.4.3 above, Leopold states that "[t]he only sure conclusion is that the biota as a whole is useful," so we may vitally need some species in the future even if they seem useless at the moment (1939b, p. 267). We cannot discard an animal or a plant by claiming that it is useless. Simply because we cannot know this. Even those of us who know most about the land cannot know it, but only "can appreciate how little is known about it" (1966, p. 190). We would be fools, if we claim that any part of the land mechanism, the whole of which has been built in the course of aeons, can be discarded, for it is useless. It might be only "seemingly useless," but most probably useful, like every "cog and wheel," for the working of the land mechanism. Thus we are expected to "preserve" all the parts of land mechanism, for their use value even if some of these parts seem useless at the moment.

In “A Biotic View of Land” Leopold says:

> Biotic farming (if I may coin such a term) … would include wild plants and animals with tame ones as expressions of fertility. To accomplish such a revolution in the landscape, there must of course be a corresponding revolution in the landholder. The farmer who now seeks merely to *preserve* the soil must take account of the superstructure as well; a good farm must be one where the wild fauna and flora has *lost acreage without losing its existence* (1939b, p. 272, emphases added).

Thus Leopold suggests a radical change in farming which is quite different from existing intensive industrial farming in which a single product is favored at the expense of many other natural entities. In Leopold’s model of “biotic farming,” farmers would let the existence of, at least representative portions of, wild plants and animals while producing tame ones. This would be a revolution, he says. But in order to achieve it, landholders must undergo a revolutionary change in their minds. We are not yet able to know how and when such a revolution in farming would occur, and this is not something within the scope of this work. But we can draw some conclusions from what Leopold says above. First, Leopold uses “preserve” in the first paragraph above, like in the sense of “conserve” that Passmore defines it. That is to say, soil, from the perspective of the private landowner, is “preserved” (or “conserved”) to meet his/her interests as much as possible. In Leopold’s view, this is mistaken. “Preserving” the soil only will not do. Farmer must also take into account other constituents of the land together with the soil, such as native flora and fauna. Then, can we say that Leopold is “preservationist” rather than “conservationist” for he argued against “preservation” of the soil for the satisfaction of human interests? We should notice that, in Leopold’s model of biotic farming, farmers are allowed to decrease the native flora and fauna, but they must not go too far to completely eradicate them. Why should farmers try to “preserve” representative samples of the native flora and fauna? Does Leopold have nonanthropocentric motivations in mind? Or does he have intrinsic value of these native flora and fauna in mind? In other words, does he suggest “preserving” representative samples of these native species for their own sake? Presumably, he does not. For he said in the previous page that seemingly useless natural entities might be shown to be useful in the future (p. 271, and cf. 1966, p. 258, see also section 4.4.3 above). Consequently, although Leopold argues against “preservation” of just a useful part of land, in the above example, of soil, this does not mean that he defends the preservation of the whole land, or its any constituent, for itself or for its intrinsic value. Rather he argues for “preservation” of some seemingly useless wild plants and animals for their probable use value. Even if we may not figure out their value at the

moment, our descendants might benefit them in the future. As Leopold says, "we use prairie flowers to reflocculate the wasting soils of the dust bowl; who knows for what purpose cranes and condors, otters and grizzlies may some day be used?" (1939b, p. 271, and 1966, p. 258).

The following is presumably the most well-known and the most oft-quoted statements of Leopold:

> A thing is right when it tends to *preserve* the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise (1966, p. 262, emphasis added).

This is the maxim of Leopold's land ethic. We have seen above that Leopold asserted that the first principle of conservation was "to *preserve* all the parts of the land mechanism" (p. 190, emphasis added). In fact, the above maxim is a more encompassing and prescriptive expression of that assertion. In other words, conservation should aim at preserving the integrity, stability and beauty of the biotic community. And the integrity, stability and beauty of biotic community might be under risk if we are not able to preserve all the parts of the land mechanism. Because as we have seen above, we do not have the knowledge to make the judgment that a part of the land mechanism is worthless. However, as it is expected from a maxim, it is prescriptive; it posits a criterion for conservation to distinguish what is right from what is wrong. It is an expression of "ecological conscience" without which "[o]bligations have no meaning" (Leopold, 1966, p. 246, and 1947b, p. 341). In Leopold's view, "the problem we face is the extension of the social conscience from people to land" (1966, p. 246, and 1947b, p. 341). But how and why should we extend our universe of conscience or responsibility from human community to biotic community? Why should we accept responsibility for land? Why should we "preserve all the parts of land mechanism" so that "integrity, stability, and beauty of the biotic community" will be maintained?

Leopold has answers to these questions as we will see in the following subsection. But let us keep these questions in mind and have a look at what Leopold says just before and after stating the maxim of his land ethic.

> The 'key-log' which must be moved to release the evolutionary process for an ethic is simply this: quit thinking about decent land-use as solely an economic problem. Examine each question in terms of what is ethically and esthetically right, as well as what is economically expedient. A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.

> It of course goes without saying that economic feasibility limits the tether of what can or cannot be done for land. It always has and it always will (1966, p. 262).

Thus Leopold's dictum arises as a rewording of the reconciliation between the utility and beauty of the land, which is one of the descriptions that Leopold made for conservation. That is to say we are responsible for preserving the integrity, stability, and beauty of the land, while benefiting from it economically. Leopold does not require us to give up use of the land for economic purposes, rather he suggests us to consider another aspect of the land that most of us seem to ignore. Land is not something which provides us only utility, crops, fruits, meat in order to meet our primitive needs. It is also a whole organism, a big community, which involves many other constituents besides ourselves. It is beautiful and good as a whole. We can, and should, carry on our economical activities but pay due concern for the wholeness, and hence health and beauty of the land at the same time.

We have seen above, in section 4.1.3 that Callicott, too, does not seem at ease with the connotations of "preserve" in the moral maxim of Leopold's land ethic. In his view, the word preserve misleadingly allies "Leopold and the land ethic with the preservationists" (1999i, p. 328). Moreover, as I indicated in the second chapter, Callicott even suggests a revised form of Leopold's moral maxim in which "preserve" is excluded (1999e, p. 138, or see Ch. 2, section 2.7, p. 85, footnote no. 25 above). Nevertheless, as we have seen in the third chapter, Callicott believes that an autonomous environmental ethic should be nonanthropocentric and rely on a nonanthropocentric axiology. Furthermore, in his view, Leopold's land ethic fulfills these conditions, namely it is nonanthropocentric and attributes intrinsic value to nature and constituents of nature. On the other hand, according to Passmore's analysis, such an ethic would be preservationist. However, Callicott seems to explain away, if not reject, preservationism due to its impracticability and its entailment of "monstrous, homicidal consequences," both for the land ethic in general, and Leopold's land ethic in particular (1999i, pp. 328-330, and 1999a, p. 13). Consequently, granted Passmore's conceptual analysis of preservationism, Callicott should concede that land ethic does not have to be nonanthropocentric, nor does it necessarily suggest attributing intrinsic value to nature. Perhaps weak anthropocentrism and letting a more liberal axiology might rescue Callicott from this quandary. Indeed, if, as he agrees, the land ethic seeks for the harmony of "an optimal mix of wildlife … with human habitation and economic exploitation of land " or "the human economy with the economy of nature," then it also provides a room for weak anthropocentrism (1999i, pp. 328 and 329). On the other hand, it might be more

appropriate to let moral agents free in valuing nature and its constituents than restrict them attribute either subjective or objective intrinsic value to them. Callicott, and some other lover of nature, may defend attribution of intrinsic value to nature. But there is no need to make this compulsory for all lovers of nature. Some may value nature intrinsically, some others may value it extrinsically.

4.4.6.2. Why Should We “Preserve?” Why Did Leopold Want To “Preserve?”

As Leopold acknowledged above, economic feasibility or economic order limits human beings in general, and conservationists in particular, about what to do for nature or land. But what could be reasons for us to do something for nature? Why should we try to preserve its integrity, stability, and beauty?

In his many works, Leopold gives various reasons to motivate us, humans, to take action in order to save nature. Most of these reasons, if not all, are closely related with human interests. Human happiness, human welfare, and human needs in general are his prime concerns while trying to establish harmony between man and land, i.e., to achieve conservation. In “Conservation Economics” Leopold also argues that conservation promises profit, and this can be a good reason to motivate us to perform conservation practices. In his words: “conservation is profitable and that the profit-incentive is sufficient to motivate its practice” (1934a, p. 199). However, in “Conservation: In Whole or In Part?” Leopold argues somewhat differently:

> [I]f conservation on private lands is to be motivated solely by profit, no unified conservation is even remotely possible. Community welfare, a sense of unity in the land, and a sense of personal pride in such unity, must in some degree move the private owner, as well as the public. Conservation cannot possibly “pay” except when the meaning is restricted to components that happen to be profitable. Conservation often pays in the sense that the profitable components can carry the unprofitable ones, just as in any industrial enterprise, a unified purpose involves carrying profitable and unprofitable component enterprises, each necessary to the functioning of the whole (1944, p. 317).

Although Leopold seems to be in a different mood from in Leopold 1934a above, we should notice that Leopold does not argue against getting profit by using land, nor does he argue against normative power of profit to motivate people to apply conservation practices. He does not say that conservation should not be motivated by profit, rather he says that it should not be “motivated solely by profit.” “Unified conservation” is the one which takes into account not only

profit, but also every component of the land among which there might be ones which do not provide immediate profit, but which are "necessary to the functioning of the whole." Besides profit, Leopold suggests "community welfare" as a more powerful incentive which may motivate people for conservation. But he does not categorically reject promoting conservation on the basis of profit, if a conservation practice promises profit. As he later points out conclusively: "[s]ome components of land can be conserved profitably, but others not. [Nevertheless] [a]ll are profitable to the community in the long run" (p. 319). Hence Leopold just warns conservationists that they should not totally rest on profit to motivate people to realize objectives of conservation. People in general, and landowners in particular, should know that every conservation practice might not lead to immediately profitable outcomes. But it definitely will lead to community welfare in the long run, and no doubt, as a part of that community, to mankind's welfare in the final analysis. If we can achieve to reach a level of consciousness so that we recognize that we are just a part of quite a larger community, and that our species welfare depends on the welfare of the whole community, and that we can contribute to that welfare, then we can feel "personal pride" in our efforts to realize objectives of conservation, even if we know that we do not have immediate profit.

Consequently, we have quite a strong reason to be conservationist or to realize conservation practices. Conservation is, sooner or later, profitable for us. Even if some conservation practices may not provide profit in the short run, we should be aware of the fact that conservation as a whole is "profitable to the community in the long run" (p. 319).

Leopold makes himself clearer about profitability of conservation in one of his latest works. He relates profitability of land with its health:

> The biota is beautiful collectively and in all its parts, but only a few of its parts are useful in the sense of yielding a profit to the private landowner. Healthy land is the only permanently profitable land, but if the biota must be whole to be healthy, and if most of its parts yield no salable products, then we cannot justify ecological conservation on economic grounds alone (1946b, p. 224).

It is possible to summarize Leopold's view about "permanent" profitability of land as follows:

> Only some parts of B (say X, Y, Z) are immediately profitable or salable.
>
> B is healthy as a whole together with all its parts.

In order to obtain profitable X, Y, Z forever, B must stay healthy.

Thus in order to have X, Y, Z forever B must be preserved as a whole.

Therefore, health of the land requires preservation of all of its constituents, even though most of these constituents do not provide immediate profit to human beings in the short run. But in order to have profit forever, we should preserve the health of the land. That is why we should preserve all the constituents of the land, irrespective of their yielding an immediate profit.

Needless to say, Leopold devoted most of his life to show the necessity of conservation for human kind. To the question why we should "preserve" the land, he mostly, if not always, provided concrete reasons related with our own needs and interests. We need nature to satisfy our diverse needs, from most basic ones such as food, drink, shelter to the subtle ones such as aesthetic, recreational, or cultural ones, etc. Satisfaction of all these needs contribute to our flourishing. So it would not be wrong to say that, for Leopold, "preservation" or "conservation" is not an end in itself, rather it is a means for a better life.

In "Planning for Wildlife" Leopold gives two reasons for wildlife preservation:

> 1.It adds to the satisfaction of living.
> 2. Wild plants and animals are parts of the land-mechanism, and cannot safely be dispensed with (1941c, p. 194).

The first reason is too manifest to require further explanation. As to the second one, we should need to know why Leopold thinks that land-mechanism and its parts "cannot safely be dispensed with." We have seen earlier that he argued for use value of every "cog and wheel" of the land mechanism which seem presently useless to us. We cannot frivolously go with the degradation of the land mechanism or any part of it of which we, too, are a part. We cannot or should not dispense with any "cog or wheel" which seems useless at the moment. Because they can prove to be useful in the future.

In "Wherefore Wildlife Ecology?" Leopold gives two more reasons, this time somewhat more "personal," to struggle for conservation:

> I have an ulterior motive, as everyone has. I am interested in the thing called "conservation." For this I have two reasons: (1) without it, our economy will ultimately fall apart; (2) without it many plants, animals, and places of entrancing interest to me as an explorer will cease to exist. I do not like to think of economic bankruptcy, nor do I

> see much object in continuing the human enterprise in a habitat stripped of what interests me most (1947a, pp. 336-37).

These two reasons presumably suffice to show that Leopold is not a "preservationist" in the sense that Passmore conceives the term. To repeat, he specifically takes care of human interests and welfare. In addition, he does not hesitate to admit the necessity of conservation policies which modify nature for the sake of human interests at the expense of losing various forms of wild life. Furthermore, he does not talk about intrinsic value of natural entities when he defends the necessity of conservation policies in particular, or of land ethic in general.

4.4.6.3. Good Life

As much as all stated in the previous subsection, we should also pay closer attention to what Leopold suggests as an incentive which may motivate people for conservation, instead of, or in addition to, the profit which could be gained by applications of conservation: "community welfare," or "human welfare," or "good life." We saw that Leopold does not completely reject promoting conservation on the basis of profit, when the conservation practice in question is really profitable. But he emphasizes that conservationists should not completely rest on profit to motivate people to realize objectives of conservation. He reminds us the fact that not every conservation practice leads to immediate profitable outcomes. However, conservation definitely contributes to the community welfare, and hence to mankind's welfare, in the long run. In his words, "[s]table (i.e. healthy) land is *essential to human welfare*" (Leopold, 1941c, p. 194, emphasis added).

The concept of "human welfare" or "community welfare" presumably is another expression of the concept of "good life" or of "better life." A closer look at the works of Leopold will reveal that his mind was quite busy with the concept of good life.[60] According to Leopold, there is a connection between the concept of good life and the conservation idea. He believes that lust for money or a good salary, instead of pursuing a life to live, is a hindrance before endorsing objectives of conservation (1942b, p. 301). Moreover, in his view, good life is not an easily attainable end through some conveniences obtained by scientific and technological means. As he

[60] Good life is another concept that Leopold borrows from Aristotle, together with the "rule of means" that we discussed earlier. As it is known, according to Aristotle, only happiness, or eudaimonia, or good life, is a good which should be pursued for its own sake.

nicely points out, good life will not follow, even if all of us were kept warm and full, and all of us "own a Ford and radio" (1933b, p. 188). Furthermore, he warns us that, unlike some who believed so, more technology is not the true cure for human welfare:

> There are few savages today who are not aware that this technological recipe for civilization is, at least for the moment, a failure. Nations fight over *who shall take charge* of increasing the take and *to whom* the better life shall accrue. Even in peace-time the energies of mankind are directed not toward *creating* the better life, but toward *dividing* the materials supposedly necessary for it. From president to parlor-pink, from the economist to stevedore, all are preoccupied with dividing the means rather than building the end (1941a, pp. 283-284, Leopold's emphases).

So, technological development alone cannot save mankind from deterioration. The World Wars proved it. Technology could only be *means* for a better life. Unless mankind realizes that the end is to achieve good life rather than to fight for having some means, human welfare could not be possible.

In his "State of the Profession," which seems more like a manifesto than an article, where he rejects being a scientist in the old sense, Leopold repeats the similar mood about the concept of good life:

> We are attempting to manage wildlife, but it is by no means certain that we shall succeed, or that this will be *our most important contribution to the design for living*.
>
> … [W]e may, without knowing it, be helping to write a new definition of what science is for.
>
> We are not scientists. We disqualify ourselves at the outset by professing loyalty to and affection for a thing: wildlife. A scientist in the old sense may have no loyalties except to abstractions, no affections except for his own kind.
>
> … We doubt whether science can claim the credit for bigger and better tools, comforts, and securities without also claiming the credit for bigger and better erosions, denudations, and pollutions. We doubt *whether the good life flows automatically from the good invention* (1940, p. 276, emphases added).

Leopold first interrogates the scientific activity as it is. The mood of the passage is also in parallel with his rejection of "science as the sharpener of [man's] sword" (cf. Leopold, 1966, pp. 260-61, and also 162-163). He manifestly rejects to be a scientist who does not respect whole nature except his/her own kind, who commits himself to abstractions without questioning whether they help attaining good life or not. And he points out that, as a wildlife manager, his main end is not the wildlife management. He does not know for sure that his efforts to manage

wildlife will succeed. He does not know for sure that his efforts for wildlife management, even if they succeed, will help to the end of good life. He only believes that wildlife management in particular, and conservation in general, might be a *means for attaining good life*. It is not an end but only means to an end. In his opinion, science, in general, too, is just a means for attaining good life.

He continues to bombard the old conception of science and to depict the role of conservationists and their relation with science as follows:

> [W]e deal with science, but we have no prospect of inventing new tools or powers. Our job is to harmonize the increasing kit of scientific tools and the increasing recklessness in using them with the shrinking biotas as to which they are applied. In the nature of things we are mediators and moderators, and unless we can help rewrite the objectives of science our job is predestined to failure (1940, pp. 276-77)

Leopold criticizes mistaken perspective of science about our end of good life in “Song of the Gavilan” in the *Almanac* as well:

> Science contributes moral as well as material blessings to the world. Its great moral contribution is objectivity, or the scientific point of view. This means doubting everything except facts; it means hewing to the facts, let the chips fall where they may. One of the facts hewn to by science is that every river needs more people, and all people need more inventions, and hence more science; the good life depends on the indefinite extension of this chain of logic. That the good life on any river may likewise depend on the perception of its music, and the preservation of some music to perceive, is a form of doubt not yet entertained by science (1966, p. 163).

So, according to Leopold, good life will not follow if we blindly hope that science will solve all of our problems so that we will reach a safer, more prosperous, and more comfortable life even if we continue to increase human population and to invade the nature recklessly. Presumably we forgot what Thoreau taught us: “In wildness is the salvation of the world” (Leopold, 1966, p. 141). Similarly, perhaps, in wildness might be the resources of good life. Existing sciences are not aware of this fact. Thus sciences should also question this: if we are not able to preserve the music in wildness, if we are not able to perceive the music of a river, of a swamp, of a rain forest, could we still really attain good life?

Thus, existing sciences, as they are, do not promise much help to correct man’s relation with land. They are in the hurry of inventing new instruments without knowing what they serve for. The problem, however, is to learn how to use the instruments to get a good and sustainable life.

And once we realize that science is not an end but a means for good life, we might be hopeful about future.

Leopold elegantly summarizes that conservation dream might be real only if all people from various professions, and not only farmers, foresters, or scientists, realize the significance of conservation in following words:

> Our profession began with the job of producing something to shoot. … We find that we cannot produce much to shoot until the landowner changes his ways of using land, and he in turn cannot change his ways until his teachers, bankers, customers, editors, governors, and trespassers change their ideas about *what land is for* (1940, p. 280, emphasis added).

As he says, Leopold began his odyssey with game management. In the course of time, he evolved into a wildlife manager (at the same time a scientist and philosopher). As he underlined above that sciences should not aim at inventing new instruments only and that good life does not follow automatically good inventions (p. 276). Now he implies that professions could only be means for good life, and the good life is possible with a healthy land. That is to say we want to conserve the land for the attainment of good life. Or the other way around, good life is not possible unless we have the land healthy and beautiful. Furthermore, good life can be attained only if most of us, who are holders of some profession, realize its importance and the necessary means to attain it. In this sense, unless moral agents whose existence, in the final analysis, depend on the health of the land, accept changing their ways of life to live in harmony with the land, good life might not be possible. All we need at the outset a deep awareness of land health and good life, what life and land is for. Unless such awareness spreads and sets in among all humans, landholders alone, who are in direct touch with the land, cannot change their ways of life in order to have healthy or stable land.

4.5. Norton's Conception of Preservation and Conservation, and Leopold the Intergrade

According to Passmore, preservationists and conservationists are triggered by different reasons which shape their acts. As he says, "their motives are quite different: the conserver of forests has his eye on the fact that posterity, too, will need timber, the preserver hopes to keep large areas of forest forever untouched by human hands" (Quoted in Norton, 1986, p. 197). In Norton's view, this difference in motives constitutes the basis of the distinction between preservationist and conservationist that Passmore makes.

Having agreed with Passmore that preservationists and conservationists have different motives toward nature, as it was observed in Muir and Pinchot case, Norton moves the discussion to his convergence hypothesis according to which various seemingly antagonistic camps in environmentalist movement, such as anthropocentrists and nonanthrpocentrists, preservationists and conservationists, may agree on similar conservation policies despite their differing motives about environment. Even though preservationists and conservationists might have different motives which affect their acts toward nature, could it not be possible that they act together in many issues related with protection of nature? That is to say, Norton believes that having different motives does not have to make preservationists and conservationists hostile camps in environmentalist realm. They may very well act together to save nature irrespective of their motives. According to Norton,

> *to conserve* a resource or the productive potential of a resource generating system is to use it wisely, with the goal of maintaining its future availability or productivity. *To preserve* is to protect an ecosystem or a species, to the extent possible, from the disruptions attendant upon it from human use" (1986, p. 200, Norton's emphases).

When put it in this way, it is possible to think that conservationism and preservationism does not have to be seen as mutually exclusive or irreconcilable acts, or that preservationists and conservationists need not be separated into antagonistic camps. Thus one may defend preservation of a certain wild area in its pristine state that fits to his personal motives. As Leopold points out, s/he may want to satisfy his/her aesthetic, recreational, cultural or scientific purposes in such areas. Or some other person may argue for conserving some other area to benefit from the resources that area may provide to humans, and aim at utilizing these resources not only for present generations but also for posterity in a sustainable manner. According to Norton, there is an attitudinal difference between preservationists and conservationists as individuals, but that difference should be seen as a matter of degree rather than categorical:

> Armed with these definitions of activities, one could then define a *conservationist policy* as one that recommends conserving the resources and productive potentials of ecosystems in all or most cases for future consumption. A *preservationist policy* would recommend that most ecosystems not yet seriously altered by human management should be maintained in their unaltered state by excluding disruptive human activities from them. A *conservationist* would thus be an individual who, faced with concrete choices regarding resource use, usually advocates a conservationist approach. A *preservationist* is someone who, when faced with choices regarding what to do with a pristine ecosystem or area, usually advocates preservation of it. These definitions make the classification of individuals as conservationists or preservationists a matter of

> degree. The designation generalizes over their policy recommendations for concrete choices (p. 200, Norton's emphases).

No doubt, conservationists and preservationists may undergo conflicting cases when they claim for preserving or conserving the very same area, as Muir and Pinchot did in the past. But, even though we have less and less areas of wilderness day by day, as Leopold anticipated many years ago, we still have wild areas need to be preserved and we still need to apply and develop conservation policies to satisfy our variety of needs in a sustainable manner for present and future generations. Under current situation, neither preservationists nor conservationists are strong enough to apply their own policies effectively. For majority of humans, and especially vast majority of power holders, remain deaf and blind to the environmental problems however they are urgent. Although many of these problems have become clearly visible, most of us do not seem likely to take action to resolve these problems. However, both preservationists and conservationists are among the minority who do care with problems of nature. They belong to the similar world views as compared to the ones who do not care or who aggravate these problems. Although they may be acting out of different motives, they agree that we are faced with urgent environmental problems and that we should take necessary measures without being too late. Thus it is quite possible that they can act together to contribute to resolution of these problems. To repeat, we need to manage various resources of nature for both present and future fellow members of our kind, and we should preserve some wild patches of nature to satisfy our aesthetic, recreational, scientific or cultural needs. That artificial rift between environmentalists as preservationists or conservationists does not contribute to the resolution of problems of nature in the least. It would be much better if the nature lovers could unite their forces against the real antagonists of nature.

We do not know whether the attempts to mitigate the opposition between conservationists and preservationists work in practice. Would Pinchot and Muir have compromised about the Hetch Hetchy Dam Project and act together to convince the government to realize a more environment friendly project, if they had agreed on a convergence account similar to Norton's, for instance? We are not able to know this, either.

But we should ask ourselves how Norton's conception of preservation and conservation makes sense in understanding Leopold's land ethic in particular, and environmental ethics and

philosophy in general. Does Norton really want to make a distinction? Or does he try to converge or merge these two concepts to show the redundancy of such a distinction?

In the previous sections in this chapter I tried to reveal how the distinction between preservation and conservation helps us to understand Leopold's environmental philosophy, and to determine Leopold's position in the light of the distinction made by Passmore. Now we can reconsider these in the light of Norton's reinterpretation of Passmore's distinction.

We have seen in section 4.4.6.2 and 4.4.6.3 that Leopold, too, have various reasons to motivate himself and conservationists to act for nature. Leopold mentions profit in the short or long run, sustainability (or permanent profitability), concern for posterity, economical and aesthetic concerns, and human welfare and happiness as the main motives for conservation. According to Passmore's distinction of preservation and conservation, Leopold seems closer to conservationism than preservationism. For he defends conservation of nature for the sake of variety of human interests in particular, and for the human welfare in general, rather than for the sake of nature itself or for intrinsic value of nature and its constituents.

In the light of Norton's depiction of conservation and preservation, however, it is hard to determine Leopold's position precisely. On the one hand, the reasons that Leopold posits for conservation make him a perfect conservationist. Because motives like concern for future generations and permanent profitability (sustainability) are motives of a conservationist, in Norton's view. On the other hand, however, Leopold would, no doubt, like "to protect an ecosystem or a species, to the extent possible, from the disruptions attendant upon it from human use" (Norton, 1986, p. 200). Thus, according to this definition of preservation by Norton, Leopold would be a preservationist at the same time.

Perhaps, this is exactly what Norton tries to show us. That is to say Leopold, or any other lover of nature, need not be labeled as preservationist or conservationist in the sense of Passmore's distinction. The superfluousness of the distinction between preservationism and conservationism, which is suggested by Norton, is also compatible with Callicott's views expressed in his 1999i. We have seen that Callicott feels uneasy with connotations of "preserve" in Leopold's maxim. He suggests that "Leopold himself was primarily concerned with integrating an optimal mix of wildlife … with human habitation and economic exploitation of

land” (1999i, p. 328). Furthermore, as we have seen above, he is also “urging that we strive to reconcile and integrate human economic activities with biological conservation,” and “that we think in terms of ‘win-win’ rather than ‘zero-sum’” (p. 330).

We should not try to segregate lovers of nature as preservationists or conservationists at all. A lover of nature could very well desire to protect an area of wilderness in its pristine state as Leopold did. But this is not in conflict with one’s desires to enjoy goods of nature to have a more satisfactory living for ourselves and leave a better and sustainable environment to future generations. In this sense it is not necessary, or it is redundant, to label Leopold as preservationist or conservationist. Perhaps this fits well to what he says in “Game and Wild Life Conservation.” That is to say, he is an intergrade “who share[s] the inspirations of both” protectionists (preservationists) and sportsmen (conservationists) at the same time (1932a, p.164). Or as it was approved by Callicott and Freyfogle, too, Leopold applied a “third conservation paradigm … between unsullied wilderness and unrestrained exploitation” which is in conformity with Leopold’s constant description of conservation as “harmony between men and land” (1999a, p. 17).

CHAPTER 5

CONCLUSION

It is an undeniable fact that humankind is substantially influencing the dynamics of nature. In the present situation, its influence is usually on the disadvantage of nonhuman members of nature. More than 100 species are going extinct every single day due mainly to anthropogenic reasons. As Sachs strikingly states, we, knowingly or unknowingly, are pushing other members of nature "over the cliff" (2008, p. 72). As recent ecological and environmental studies show, whether anthropogenic impact on nature is really on the advantage of human species is highly doubtful. We might be destroying ourselves while we are "developing" and relentlessly disrupting nature.

Nonetheless, blaming the whole human species, through derogatory concept of anthropocentrism, do not contribute much to the resolution of ecological and environmental problems. No doubt, "anthropocentrism" has a normative power to make us question the role of human species on environmental degradation. But it unfairly puts the blame on every human being as if humankind consisted only of stereotypical individuals who jointly deteriorate nature. There might be different reasons other than human-centeredness behind the environmental problems. There might also be reasons which lead to human-centered or anthropocentric viewpoint. Instead of trying to explain the huge problems we are faced with through some new concepts only, we should ponder upon real reasons and mechanisms – social, cultural, economical, political, scientific, technological, etc. – behind these problems, rather than their effects which are seen on the surface, if we really want to resolve these problems.

Contrary to what Callicott likes to believe, I argued that Leopold is not nonanthropocentrist and he does not suggest us a nonanthropocentric ethic. It is no doubt true that Leopold argues for an all encompassing holistic environmental ethic which will regulate or harmonize the relations between human and nonhuman members of nature including plants, animals, soil, air, water, etc. He rejects views which defend irresponsible and relentless exploitation of nature on the basis of attributing some special value to human beings. And above all, for him, preserving the health of whole nature has crucial importance. But, on the other hand, Leopold never overlooks meeting

the needs and interests of humans even if it might seriously harm interests of nonhuman members. Although he criticizes arguments which blindly defend satisfaction of rights, needs, and interests of human beings without considering their effects on the whole nature, he always tries to find a middle way between satisfying growing demands of human beings and protecting the health of the whole land. Indeed, as he states conservation aims at attaining harmony between humans and the whole nature, or between utility and beauty of the land.

The concept of value plays an eminent role in Leopold’s land ethic as it does in most of the works about environmental ethics. However, Leopold does not seem to have a concept of intrinsic value, unlike Callicott believes. As I argued in Chapter 3, he does attribute value to nature and its constituents under a wide variety of names, but all of them are human oriented and instrumental to some human interest. They are strongly tied with the needs, desires, taste, in general, the interests of humans. Leopold’s conception of aesthetics of nature is human-centered and instrumental to human well-being as well. In his view, nature provides us variety of aesthetic harvest that we can reap (1966, p. xix). He plainly states that the motivation behind our seeking contact with nature is pleasure (p. 283). Indeed, he perceives and describes “conservation esthetic” in terms of variety of satisfactions humans get while they are experiencing in nature (cf. pp. 280-295, and see also Ch. 3, section 3.2, pp. 102-111 above).

On the other hand, Callicott’s own attempts to justify intrinsic value of nonhuman beings do not seem promising in providing a nonanthropocentric axiology which is supposed to be the essential basis for the autonomy of environmental ethics. Moreover, I cast doubt on Callicott’s belief that normative power of intrinsic value is higher than that of instrumental values. I argued that normative power of values might change depending on the biopsychosociocultural and cognitive constitution of human individuals. Furthermore, the Aristotelian concept of good life seems to have a substantial part in Leopold’s mind. Therefore I argued that it is possible to justify moral considerability of nonhuman members of nature by combining Leopold’s moral maxim with the ultimate end of good life. Hence we do not need to attribute intrinsic value to nature to normatively justify protection of nonhuman members of nature or conservation. Nevertheless, I suggested, as a compromise, letting valuers free in attributing value to nature and its constituents. I speculated that Leopold might not have objected to the attribution of intrinsic value to nonhuman beings, even though he argued against attributing some special value to human beings or he did not attribute intrinsic value to nature and its members. For he, as a man

of practical wisdom, would presumably welcome an attempt which might strengthen conservationist movement. Thus we can benefit both instrumental and intrinsic value of nature together to grow the embryo of conservationist movement taking into account a wide variety of characteristics among human agents.

Leopold does not like attributing a special *sui generis* value even to humankind. Because he considers that such value attribution is used to legitimize irresponsible exploitation of nature. He is very well aware that humans, like nonhuman species, have characteristics which differentiate them from other beings. But he brings forward only a few of these characteristics as the objective evidence of human superiority. The features Leopold underlines are the ones which promote human moral agency. In his view, a moral being is not the one who attributes a higher importance to himself/herself resting on some religious or pseudo-scientific views which let humans irresponsibly and relentlessly use nature as if nature were a commodity of human beings. Nor a moral human being, according to Leopold, is the one who blindly goes after satisfying his/her instincts, needs or interests without taking into account the effects of his/her acts on the communities s/he belongs to. Leopold tries to make us realize that we belong to nature, not the reverse. We are part of nature or land, like other members. That is why, unlike the views which draw moral considerability of human beings from a value peculiar to only human species, he emphasizes moral agency of human beings. According to Leopold, our superiority lies in the fact that we may accept responsibility for beings other than ourselves, or in the fact that we may establish a society in which not only humans but also other members of nature are respected. In other words, we are superior beings as much as we are moral beings who can continuously and sincerely enlarge their scope of moral responsibility.

Homo sapiens is the only species on earth most of the members of which are capable of moral agency. As moral agents we are capable of extending our scope of moral responsibility and decide moral considerability of beings who are not moral agents. Moral agency is not the necessary condition of being morally considerable. Indeed, we, by and large, acknowledge moral considerability of all human beings, although many human beings are not, in fact, moral agents. It is an historical fact that some of our ancestors denied the moral considerability of even our species members through various apparatuses such as cannibalism, slavery, fascism, torture, war, etc. In the course of our evolutionary and historical development we have achieved to overcome some of these evils, and almost completely agreed, at least in principle, on equal moral

considerability of all human beings irrespective of their religious, racial, sexual, etc. differences, or their varying physical or mental capabilities. Consequently, it is wrong to presuppose that only human species is morally considerable. The fact is that only some of the members of human species are moral agents. Leopold's land ethic shows us that we can accept that nonhuman members of nature are morally considerable, as we have mostly accepted that all human beings deserve moral consideration irrespective of their characteristics or their moral agency.

As Leopold states, we have begun to realize the value of nature as we have begun to realize the fact that nature is essential for our welfare and continuation of our species, and that the natural resources are not limitless. Thus we have begun to realize that we should protect nature for the welfare of present and future generations. Furthermore, if we can conceive that we are members not only of human community but also of biotic community, we can acknowledge that nonhuman members of nature deserve respect and moral consideration, as we have agreed that all our fellow species members do. At present, only some human beings have felt the agony of losing nature consciously. They are conservationists. In Leopold's view, they constitute the embryo of the land ethic or conservationist movement in general. Hence he hopes that that embryo will grow to give birth to the full realization of the third stage in the evolution of ethics. He believes that there already exists a widespread consciousness about nature among humans, but it is not strong and deep enough to move them to realize conservation purposes. What he expects from conservationists, who constitute the embryo of the land ethic, is to activate that passive consciousness and to grow the embryo toward the fruition of the last stage.

According to Leopold, both technology and ethics are human inventions. Technology has been invented to suspend carrying capacity of humans in nature. Ethics have been invented to suspend predation among human beings. Furthermore, he believes that these inventions have evolved in the course of history and jointly made extensive and intensive human dominance on nature possible. But as we have begun to understand the fact that nature is not unlimited and there is a limit to extend carrying capacity through the usage of tools, we have also begun to realize that we need to step up our conception of ethics or that we need to have a new ethic. Thus, in this sense, land ethic in particular, and environmental ethics in general, arise as a necessity to make possible long term protection of nature for our own good.

We need to have a new ethic, because existing ethics are not able to coordinate relations between human and nonhuman members of the land. Leopold suggests quite plausibly that we, as moral beings, can extend our scope of moral responsibility to include nonhuman members of nature. What Leopold suggests is quite possible, evolutionarily and philosophically. After we have invented ethics, we have continuously improved our conception of ethics, and we have continuously enlarged our scope of moral responsibility in the course of time. Furthermore, an ethic which will guide our relations with nonhuman members of nature is ecologically necessary, because it has been understood that availability and sufficiency of natural resources and the stability or health of the land may not be maintained through development of technology alone.

Nevertheless, an ethic would be impotent unless the vast majority of moral agents mutually agree on its principles. As Leopold observes rightfully, existing socioeconomic system does not support constitution of such an agreement, rather it "is headed away from … an intense consciousness of land" (1966, p. 261). But Leopold does not seem to hurry to change the existing socioeconomic system, although he does not approve of it. Instead, he suggests an evolutionary transformation. We need to develop "ecological conscience," which will pervade through the whole humankind, so that we will realize in our hearts and minds that harming nonhuman members of nature, without having a plausible reason, is wrong, as we have mutually agreed on the wrongness of harming our species members irrespective of their different characteristics.

On the other hand, Leopold is well aware of the fact that conservation can only be realized by human beings or "under human dominance" (1942c, p. 199). In other words, conservation, which aims at reaching harmony between humans and the land, is a human and humane activity. Although environmental problems we are faced with emerged primarily due to human activities, only human species is capable of overcoming them. We have wounded nature, but only we can heal the wounds, if we will continue to survive.

No doubt, nature may heal its wounds faster, through its own dynamics, if there were no human intervention. But this should not be an alternative for beings who are capable of moral agency. It is not an alternative for Leopold, either. He does not imagine a world without humans, nor does he suggest equal moral consideration for human and nonhuman members of nature. We can acknowledge the fact that many members of nature are much more essential than us for the

preservation of the health of the land, if we can look at nature from an analytical distance, for instance from a mountaintop, i.e., if we can "think like a mountain," as Leopold suggests (1966, p. 140). But should this acknowledgment make us give up many good, at least "non-evil," human activities which are, in fact, on the disadvantage of nonhuman nature? It does not make Leopold consider needs and interests of humans on a par with those of nonhumans. As a man of practical wisdom, or as an intergrade, as he calls himself, he always looks for reconciliation between satisfying human needs and interests and protecting the health of the land. That is why, Leopold is not nonanthropocentrist. If we would name him in terms of this relatively new concept of anthropocentrism, it would be appropriate to call him weak or longsighted anthropocentrist who tries to attain harmony between humans and nature.

One of the most important criticisms brought up against land ethic is that it sacrifices individual rights to the good of the whole. That is why land ethic was accused of being ecofascistic. Callicott tried to ward off that criticism first by arguing that land ethic is an accretion to existing human ethics. He argued that our accepting responsibility for whole nature need not prevent us realizing our duties to our families and other species members. In his view, there is a hierarchy of duties. In this sense, our duties to the members of our family precede those to our fellow citizens and our country, to the citizens of some other country or the humankind in general, and to nonhuman members of biotic community and the whole land respectively. But it did not take too long to have another criticism in response to his account. If we are obliged, first and foremost, to perform our duties to our fellow species members, beginning from the ones closer to us, we may often have to postpone our duties to nature and its nonhuman constituents. Therefore, the land ethic is nothing but a paper tiger. To overcome this dilemma Callicott offered two priority principles. Nevertheless, contrary to Callicott's intentions, they did not suffice to produce an ethic which is strong and practicable enough but not anthropocentric and not ecofascistic at the same time. I argued that this dilemma that land ethic faces can be resolved by endorsing a weak anthropocentric position, which is compatible with Leopold's own views. Leopoldian land ethic is not ecofascistic nor is it a paper tiger. It is not a paper tiger, because it radically challenges existing ethics for the necessity of stepping in a new stage in the evolutionary development of ethics so that we will accept enlarging our scope of responsibility to include nonhuman members of nature besides human beings. It is not ecofascistic, because it is weak anthropocentric. It tries to obtain harmony between humans and nature. This might seem to be conflicting with the maxim of the land ethic which states ecological rightness as preserving

"the integrity, stability, and beauty" of the land and with the plain membership of the biotic community (Leopold, 1966, p.262). However, plain membership of biotic community and the maxim of land ethic have symbolic significance to remind us value of nonhuman nature for our welfare. As Leopold manifestly states, we need to protect the health of the land because this is "essential to human welfare" (1941c, p. 194).

Another controversy about Leopold is whether he, and the ethic he suggests, is preservationist or conservationist. Leopold has used both concepts and their derivatives interchangeably throughout his works. He does not seem to make a deliberate distinction between these concepts. John Passmore, after about two and a half decades the *Almanac* was published, made a plain distinction. He distinguished preservationism from conservationism with respect to motivations of people who felt themselves responsible for nature. According to the distinction made by Passmore, conservationists, while defending conservation of nature, are motivated mainly by human interests. They defend conservation of nature in order to meet interests of human beings both in the present and in the future. On the other hand, preservationists defend protection of nature for the sake of nature itself rather than for the sake of human beings. According to preservationists, nature and its constituents are valuable irrespective of human value attributions and human interests. In other words, in the eyes of preservationists, nature and its constituents are intrinsically valuable. Furthermore preservationists accept that nonhuman beings are morally considerable as much as human beings are. That is to say, they are at the same time nonanthropocentrists.

I analyzed Leopold's works in two periods, the works written in 1925 and earlier and the works written after 1933. However, I decided to analyze a work written in 1932, namely "Game and Wild Life Conservation" separately. For Leopold identified himself, there, as an intergrade. Actually, intergradeness of Leopold can be seen in his all works. He always looked for a third way, or reconciliation, between opposing extremes. Furthermore, this is also in parallel with Callicott and Freyfogle's interpretation that Leopold applied "third conservation program … between unsullied wilderness and unrestrained exploitation" or between "Muir paradigm" and "Pinchot paradigm" (Callicott and Freyfogle, 1999a, pp. 15-17).

Analysis of early works of Leopold reveals that Leopold was much closer to conservationism than preservationism. He spent much effort for developing and applying his ideas about land and

game management. At the outset he fervently endorsed Pinchot's utilitarian principle as a form of land use. Later he has tried to revise and broaden its perspective. However, there is no sense in which one can find a "preservationist program in the rhetoric of resource conservation" or "unstated yet unmistakably present" intrinsic value attributed to nature or its constituents, as opposed to Callicott and Freyfogle's contentions, in Leopold's early works. When Leopold argues for "preservation" of some wild life, this is not for its own sake or for its intrinsic value but for the better satisfaction of human interests. However, it is possible to observe reconciliation as a constant feature of Leopold's characteristic, in his early works, too. Although he has recognized that reconciliation with industrial development was on a knife edge towards 1925, he has always searched for reconciliation whenever he thought that this was possible, between purposes of industrial progress and those of conservation, between utility and beauty of nature, between human economical processes and whole nature, and so on.

Leopold identified himself as an intergrade who has the desires of not only sportsmen and game managers but also protectionists in "Game and Wild Life Conservation." This identification suits well to his conception of conservation through his whole odyssey. He has always looked for a third way, or reconciliation, between opposing extremes. For Leopold, hunting was a very special human affair. He never thought that hunting and love of nature were conflicting issues. As we have seen in the second chapter, hunting, in Leopold's eyes, was an aesthetic performance more than it was a natural affair to satisfy hunger. He developed and applied various game management policies in order to provide a sustainable game population for himself and his fellow species members. But he soon understood that game and land management ought to be carried out in a conservation perspective which would involve whole nature. He recognized that land and game management was just a part of nature conservation. On the other hand, however, extreme protectionists of a certain part of land, such as those who want to protect a species only, or soil only, or a landscape only, should understand that such policies could not work in the long run. Conservationists should be aware of the fact that they constitute only a little minority of human population. Furthermore, they should develop and perform policies which would take care of nature as a whole. Extreme policy suggestions to protect a species only could not hold. That is why Leopold recommended "a system of proposed public actions" as opposed to "the system of personal wishes" which is suggested by extreme utopian protectionists. That is why he did not hesitate to identify himself as an intergrade who shared the inspirations of both protectionists and sportsmen. He tried to find a middle way among people who had a plethora of

views, value attributions about nature. He was keenly aware of the fact that insisting on extreme policies would not find sufficient support, or worse would preclude spread of conservationist ideas, which were in the state of embryo yet, among people for most of whom “the price of U. S. Steel” was much more important than “the status of blue-goose.” That is why, as an intergrade, he had to reconcile “the ugly realities of economics” and “the ideals of protectionists.” For he believed that such an attitude was necessary to unite conservationists who were “ready to hang separately” (1932a, pp. 164-68).

Although Leopold does not make a conceptual distinction between “preservation” and “conservation,” he makes some distinctions among conservationists and conservation practices especially in his later works. Broadly speaking, in Leopold’s view, conservationists can be divided into two. On the one hand we have “ecological conservationists” who defend that land should be treated as a whole together with all its constituents irrespective of their economic value. On the other hand, we have “lop-sided conservationists” who believe that some parts of land, which promise economic benefit in the short run, could be promoted at the expense of some others, which seem useless at the moment. Nevertheless, the distinction that Leopold makes between conservationists and conservation practices does not seem to support a distinction between “preservation” and “conservation.” For “ecological conservation” that Leopold defends is strongly tied with human interests. While defending conservation of nature, Leopold allows humans to put land and game managerial policies into practice whenever they are needed. And all these policies are carried out “under human dominance” and for the sake of human interests in the long run (Leopold, 1942c, p. 199). Furthermore, they are allowable even if they could harm, or even kill or eradicate, some nonhuman individuals. However, Leopold never mentions a policy of conservation which may seriously harm human individuals.

While arguing for “conservation” or “preservation,” irrespective of the term he prefers to use, Leopold has human interests, needs, welfare, and happiness in mind rather than the intrinsic value of nature or its constituents. In Leopold’s view, it is possible to motivate ourselves about the necessity of conservation by recognizing the benefits that conservation practices will provide us in the short or long run. These benefits might be economic, scientific, cultural, recreational, aesthetic, and so forth. Or we might have some ethical concerns about future generations. In fact, all these motives might be subsumed under the goal of human happiness or good life. For Leopold, the main goal seems to be good life, and preserving the integrity, stability and beauty

of the land is a necessary means to this ultimate end. We need to preserve the stability of the land, simply because this is a requisite for our own well being. Actually, how can we attain good life in a nature which lost its integrity, stability and beauty?

Bryan G. Norton is well known by his convergence hypothesis according to which it is possible to develop conservation policies for which different factions in environmentalist realm might give consent, even if proponents of these factions might continue to have different motives and conceptions about nature and its constituents. Consistent with this hypothesis, Norton suggests that the slight degree of difference in point of view of a preservationist and a conservationist would not prevent their agreement on many concrete conservation policies. In his view, a resource conservationist who wants to conserve natural resources for future consumption and a nature preservationist who wants to protect an area of wilderness in its pristine state could very well agree on, and defend together, many conservation practices. As Leopold said toward protectionists, different factions in conservationist movement could "hang together … to save some wild life" rather than "hang separately" (1932a, p. 168). In this sense it is better to accept Leopold, as he once called himself, as an intergrade "who share[s] the inspirations of both" preservationists and conservationists, even if he seems closer to conservationism than preservationism (p. 164). I suggest that this is also in conformity with Callicott's uneasiness about some negative or unfortunate connotations of "preserve," and his approval of Leopold's applying a third way between resourcism of Pinchot and preservationism of Muir. In brief, the separation between preservationism and conservationism is an artificial rift which does not contribute to resolving environmental problems, and which is manifestly contradicting with intentions of Leopold. Instead of segregating nature lovers as preservationists and conservationists we had better find ways that would make them "hang together" and grow the embryo of conservationists as Leopold wanted to do.

Leopoldian land ethic is a human ethic, an ethic which aims at better and long term human survival, in the final analysis. It makes sense as much as human beings continue to survive. If there were no humans, there would be no land ethic and perhaps no ethics at all. Presently, human impact on nature is similar to the case of potato bug which exterminates potato while exterminating itself, as strikingly analogized by Leopold (1923, p.97). Our difference lies in the fact that we, at least some of us, are able to see and act in order to change this. Land ethic suggests us extending our moral responsibility to nonhuman realm. But, frankly speaking, most

probably, land would recover itself faster if more than seven billions of human beings somehow got perished. In other words, however misanthropic it might seem, if humans went extinct – *ceteris paribus* – this would strongly contribute to preserving "the integrity, stability, and beauty of the biotic community" (Leopold, 1966, p. 262). Our extinction presumably would be much more effective than our accepting moral considerability of nonhuman members of nature for the good of the biotic community. One may object to this by saying that nature is beautiful with humans. But this would not make sense more than an "anthropocentric" rhetoric. Scientific data indicate that, extinction rate has been multiplied by 100 to 1,000 times due mainly to anthropogenic factors. Consequently, a world without humans presumably would be much more diverse, stable, healthy, and beautiful, than the case with humans. But Leopold did not suggest culling human beings, unlike he did nonhuman beings, at the expense of his own moral maxim. Indeed, Callicott, too, is very well aware of the fact that the moral maxim of the land ethic, if rigidly and stringently obeyed, may lead to untoward, even "monstrous, homicidal," or "repugnant misanthropic," outcomes, which "was utterly unacceptable" (Callicott, 1999a, p. 13; 1999j, p. 181). Thus Leopold's motto is important, but symbolically. We cannot, and should not, apply it conservatively. Being sharp, brief and concise, as it is expected from a moral maxim, it reminds us the fact that protection of nature is essential for the continuance of the life on earth in general, and human well-being in particular. To repeat, for Leopoldian land ethic *summum bonum* is good life, which might be similar to the Aristotelian conception. Land ethic is a human ethic, and protection of nature as a whole is a necessary requisite for our attaining good life.

On the other hand, a thorough nonanthropocentric ethic might be suggested as an ideal case for maintaining the health of the land. That is to say, if all human agents achieve to think like a mountain, and agree that they are plain members of nature, and that their existence is not more significant than those of other members of nature, and accept strictly obeying the principles and rules of an ethic which seriously limits their freedom and many interests and desires for the sake of whole nature, the environmental problems we are faced with might be resolved more effectively. But ideals are not practicable as much as they seem prima facie good. Scientific data show that the problems we are faced with are too urgent and heavy to wait for making humanity accept the realization of the ideal. Leopold was aware of those bitter facts. That is why, he has always taken into account practicability and always suggested middle grounds to reconcile or harmonize human realm with nonhuman one to make real the conservation purposes in practice. In this sense, weak anthropocentric land ethic, which urges conservation of nature for human

well-being, seems as the best practicable alternative which would serve as the basis of those middle grounds Leopold sought.

REFERENCES

Aristotle. (1995). *Politics* (Trevor J. Saunders, Trans.). Oxford: Oxford University Press.

Aristotle. (2002). *Nicomachean Ethics* (Christopher Rowe, Trans.). Oxford: Oxford University Press.

Bandman, B. (1982). Do Future Generations Have the Right to Breathe Clean Air? A Note. In *Political Theory* Vol. 10, No. 1, 95-102.

Beardsley, M. (1965) Intrinsic Value. In *Philosophy and Phenomenological Research,* Vol. 26, No.1, 1-17.

Birch, C. (2001). Environmental Ethics in Process Thought. In *Concrescence: The Australasian Journal for Process Thought*, 2, 1-11. Retrieved on April 2, 2008, from http://www.concrescence.org/ajpt_papers/vol102/02_birch.htm

Bookchin, M. (1989). *Remaking Society*. Montreal: Black Rose Books.

Callenbach, E. (2008). *Ecology: A pocket guide*. Berkeley: University of California Press.

Callicott, J. B. (1984). Non-Anthropocentric Value Theory and Environmental Ethics. In *American Philosophical Quarterly,* vol. 21, no. 4, 299-309.

Callicott, J. B. (1987). Preface. In Callicott J. B. (Ed.) *Companion to A Sand County Almanac* (pp. vii-x). Madison, Wisconsin: The University of Wisconsin Press.

Callicott, J. B. (1989). *In Defense of the Land Ethic: Essays in Environmental Philosophy*. Albany, New York: State University of New York Press.

Callicott, J. B. (1989a). Introduction: The Real Work. In *In Defense of the Land Ethic: Essays in Environmental Philosophy* (pp. 1-12). Albany, New York: State University of New York Press.

Callicott, J. B. (1989b). Animal Liberation: A Triangular Affair. In *In Defense of the Land Ethic: Essays in Environmental Philosophy* (pp. 15-38). Albany, New York: State University of New York Press.

Callicott, J. B. (1989c). The Conceptual Foundations of the Land Ethic. In *In Defense of the Land Ethic: Essays in Environmental Philosophy* (pp. 75-99). Albany, New York: State University of New York Press.

Callicott, J. B. (1989d). Hume's Is/Ought Dichotomy and the Relation of Ecology to Leopold's Land Ethic. In *In Defense of the Land Ethic: Essays in Environmental Philosophy* (pp. 117-127). Albany, New York: State University of New York Press.

Callicott, J. B. (1989e). Intrinsic Value, Quantum Theory, and Environmental Ethics. In *In Defense of the Land Ethic: Essays in Environmental Philosophy* (pp. 157-174). Albany, New York: State University of New York Press.

Callicott, J. B. (1989f). Leopold's Land Aesthetic. In *In Defense of the Land Ethic: Essays in Environmental Philosophy* (pp. 239-247). Albany, New York: State University of New York Press.

Callicott, J. B. (1989g). On the Intrinsic Value of Nonhuman Species. In *In Defense of the Land Ethic: Essays in Environmental Philosophy* (pp. 129-155). Albany, New York: State University of New York Press.

Callicott, J. B. (1999). *Beyond the Land Ethic*. Albany, New York: State University of New York Press.

Callicott, J. B. (1999a). Introduction: Compass Points in Environmental Philosophy. In *Beyond the Land Ethic* (pp. 1-24). Albany, New York: State University of New York Press.

Callicott, J. B. (1999b). How Environmental Ethical Theory May Be Put into Practice. In *Beyond the Land Ethic* (pp. 45-58). Albany, New York: State University of New York Press.

Callicott, J. B. (1999c). Holistic Environmental Ethics and the Problem of Ecofascism. In *Beyond the Land Ethic* (pp. 59-76). Albany, New York: State University of New York Press.

Callicott, J. B. (1999d). Just the Facts, Ma'am. In *Beyond the Land Ethic* (pp. 79-97). Albany, New York: State University of New York Press.

Callicott, J. B. (1999e). Do Deconstructive Ecology and Sociobiology Undermine the Leopold Land Ethic? In *Beyond the Land Ethic* (pp. 117-139). Albany, New York: State University of New York Press.

Callicott, J. B. (1999f). Rolston on Intrinsic Value: A Deconstruction. In *Beyond the Land Ethic* (pp. 221-237). Albany, New York: State University of New York Press.

Callicott, J. B. (1999g). Intrinsic Value in Nature: A Metaethical Analysis. In *Beyond the Land Ethic* (pp. 239-261). Albany, New York: State University of New York Press.

Callicott, J. B. (1999h). Aldo Leopold's Concept of Ecosystem Health. In *Beyond the Land Ethic* (pp. 333-345). Albany, New York: State University of New York Press.

Callicott, J. B. (1999i). Whither Conservation Ethics? In *Beyond the Land Ethic* (pp. 321-331). Albany, New York: State University of New York Press.

Callicott, J. B. (1999j). Moral Monism in Environmental Ethics Defended. In *Beyond the Land Ethic* (pp. 171-183). Albany, New York: State University of New York Press.

Callicott, J. B. & Freyfogle, E. T. (Eds.). (1999). *For the Health of the Land*. Washington: Island Press.

Callicott, J. B. & Freyfogle, E. T. (Eds.). (1999a). Introduction. In *For the Health of the Land* (pp. 3-26). Washington: Island Press.

Convention on Biological Diversity. (1992). Retrieved August 6, 2011, from http://www.cbd.int/doc/legal/cbd-en.pdf

Crook, S. (2002). Callicott's Land Communitarianism. In *Journal of Applied Philosophy.* Vol. 19, No. 2, 175-184.

Dust Bowl. (2011). In *Wikipedia, the free encyclopedia*. Retrieved August 2, 2011, from http://en.wikipedia.org/wiki/Dust_Bowl.

Fingarette, H. (1967). *On Responsibility*. New York: Basic Books.

Flader, S. L., & Callicott, J. B. (Eds.). (1991). *The River of the Mother of God and Other Essays by Aldo Leopold*. Madison, Wisconsin: The University of Wisconsin Press.

Flader, S. L., & Callicott, J. B. (Eds.). (1991a). Aldo Leopold: A Brief Chronology. In Aldo Leopold, *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. xiii-xv). Madison, Wisconsin: The University of Wisconsin Press.

Flader, S. L., & Callicott, J. B. (Eds.). (1991b). Introduction. In Aldo Leopold, *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 3-31). Madison, Wisconsin: The University of Wisconsin Press.

Hanser, M. (1990). Harming Future People. In *Philosophy and Public Affairs*. Vol. 19, No.1, 47-70.

Hayward, T. (1998). *Political Theory and Ecological Values*. Cambridge, UK: Polity Press.

International Day for Biological Diversity, 22 May. Facts and Figures. (n.d.). Retrieved August 6, 2011, from http://www.un.org/en/events/biodiversityday/convention.shtml

Kavka, G. S. (1982). The Paradox of Future Individuals. In *Philosophy and Public Affairs*. Vol. 11, No.2, 93-112.

Leopold, A. (1915). The Varmint Question. In Flader, S. L., & Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 47-48). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1918a). The Popular Wilderness Fallacy: An Idea That Is Fast Exploding. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 49-52). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1918b). Forestry and Game Conservation. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 53-59). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1921). The Wilderness and Its Place in Forest Recreational Policy. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 78-81). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1923). Some Fundamentals of Conservation in the Southwest. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 86-97). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1924c). The River of the Mother of God. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 123-127). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1925a). Conserving the Covered Wagon. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 128-132). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1925c). Wilderness as a Form of Land Use. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 134-142). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1930). Report to the American Game Conference on an American Game Policy. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 150-155). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1931). Game Methods: The American Way. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 156-163). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1932a). Game and Wildlife Conservation. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 164-168). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1932b). Grand-Opera Game. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 169-172). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1932c). Game Management: A New Field for Science. In Callicott, J. B. and Freyfogle, E. T. (Eds.) *For the Health of the Land* (pp. 27-32). Washington: Island Press.

Leopold, A. (1933b). The Conservation Ethic. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 181-192). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1934a). Conservation Economics. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 193-202). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1934c). The Arboretum and the University. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 209-211). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1935a). Land Pathology. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 212-217). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1935b). Coon Valley: An Adventure in Cooperative Conservation. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 218-223). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1936a). Threatened Species. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 230-234). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1936b). Means and Ends in Wild Life Management. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 235-238). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1937). Conservationist in Mexico. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 239-244). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1938a). Chukaremia. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 245-246). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1939a). The Farmer as a Conservationist. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 255-265). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1939b). A Biotic View of Land. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 266-273). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1940). The State of the Profession. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 276-280). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1941a). Ecology and Politics. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 281-286). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1941b). Wilderness as a Land Laboratory. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 287-289). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1941c). Planning for Wildlife. In Callicott, J. B. and Freyfogle, E. T. (Eds.) *For the Health of the Land* (pp. 193-198). Washington: Island Press.

Leopold, A. (1942a). Land-Use and Democracy. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 295-300). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1942b). The Role of Wildlife in a Liberal Education. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 301-305). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1942c). Biotic Land-Use. In Callicott, J. B. and Freyfogle, E. T. (Eds.) *For the Health of the Land* (pp. 198-207). Washington: Island Press.

Leopold, A. (1943). What Is a Weed? In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 306-309). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1944). Conservation: In Whole or in Part? In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 310-319). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1945). The Outlook for Farm Wildlife. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 323-326). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1946a). Adventures of a Conservation Commissioner. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 330-335). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1946b). The Land-Health Concept and Conservation. In Callicott, J. B. and Freyfogle, E. T. (Eds.) *For the Health of the Land* (pp. 218-226). Washington: Island Press.

Leopold, A. (1947a). Wherefore Wildlife Ecology? In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 336-337). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1947b). The Ecological Conscience. In Flader, S. L. and Callicott, J. B. (Eds.) *The River of the Mother of God and Other Essays by Aldo Leopold* (pp. 338-346). Madison, Wisconsin: The University of Wisconsin Press.

Leopold, A. (1966). *A Sand County Almanac with Essays on Conservation from Round River*. New York: Ballantine Books.

Muir, J. (1997). Hetch Hetchy Valley. In Cronon, W. (Ed.) *Nature Writings*. New York: The Library of America.

Nash, R. (1987). Aldo Leopold's Intellectual Heritage. In Callicott, J. B. (Ed.) *Companion to A Sand County Almanac* (pp. 63-88). Madison, Wisconsin: The University of Wisconsin Press.

Nolt, J. (2011). Arguments for and against Obligations to Future Generations. Retrieved October 10, 2011, from http://web.utk.edu/~nolt/courses/346/futurgen.htm

Norton, B. G. (1986). Conservation and Preservation: A Conceptual Rehabilitation. In *Environmental Ethics*. Vol. 8, 195-220.

Norton, B. G. (1988). The Constancy of Leopold's Land Ethic. In *Conservation Biology*. Vol. 2, No. 1, 93-102. Retrieved July 30, 2010, from http://www.jstor.org/stable/pdfplus/2386275.pdf

O'Neill, J. (1992). The Varieties of Intrinsic Value. In *Monist*, Vol. 75, No. 2, 119-137.

Ouspensky, P. D. (1922). *Tertium Organum*: Chapter XVII. Retrieved July 8, 2011 from http://www.sacred-texts.com/eso/to/to20.htm#page_198

Parfit, D. (1982). Future Generations: Further Problems. In *Philosophy and Public Affairs*. Vol. 11, No. 2, 113-172.

Regan, T. (1985). *The Case for Animal Rights*. Berkeley: University of California Press.

Regan, T. (1992). Does Environmental Ethics Rest on a Mistake? In *Monist,* Vol. 75, No. 2, 161-182.

Sachs, J. D. (2008). *Common Wealth*. New York: The Penguin Press.

Sewall Wright. (2011). In *Wikipedia, the free encyclopedia*. Retrieved October 3, 2011 from http://en.wikipedia.org/wiki/Sewall_Wright.

The Universal Declaration of Human Rights. (n.d.). Retrieved August 4, 2011, from http://www.un.org/en/documents/udhr/index.shtml#a1

Vanek, D. (2001). Interview with Murray Bookchin. In *Harbinger, A Journal of Social Ecology*. Vol. 2 No.1, 1-9. Retrieved January 31, 2009 from http://www.social-ecology.org/harbinger/vol2no1/bookchin.html

Varner, G. E. (1991). No Holism without Pluralism. *Environmental Ethics.* Vol. 13, 175-179.

Wald, M. L. and Wilson, M. (2009, February 9). No Human Casualties, but What About the Luggage? *The New York Times*. Retrieved September 8, 2011, from http://www.nytimes.com/2009/02/09/nyregion/09luggage.html

Wilson, E. O. (1984). *Biophilia*. Cambridge, Massachusetts, London: Harvard University Press.

Wilson, E. O. (1992). *The Diversity of Life*. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

Wilson, E. O. (2002). *The Future of Life*. New York: Vintage Books.

APPENDIX A

TEZ FOTOKOPİSİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü ☐

Sosyal Bilimler Enstitüsü ☐

Uygulamalı Matematik Enstitüsü ☐

Enformatik Enstitüsü ☐

Deniz Bilimleri Enstitüsü ☐

YAZARIN

Soyadı : Özer
Adı : Mahmut
Bölümü : Felsefe

TEZİN ADI : On the Possibility, Necessity, and Practicability of Leopold's Land Ethic.

TEZİN TÜRÜ : Yüksek Lisans ☐ Doktora ☐

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir. ☐
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir. ☐
3. Tezimden bir (1) yıl süreyle fotokopi alınamaz. ☐

TEZİN KÜTÜPHANEYE TESLİM TARİHİ:

APPENDIX B

TURKISH SUMMARY

I

Günümüzde, insan türünün, doğa ve doğal kaynakların kullanımı üzerinde, diğer türlerle kıyaslanmayacak ölçüde baskın olduğu yadsınamaz bir gerçekliktir. Mevcut etkin üretim yöntemi ve yaşama biçimi ile tür olarak insan, genel olarak, doğayı ve onun insan dışı unsurlarını zenginleştirmekten çok tahrip etmektedir. Yapılan tahminlere göre mevcut insan ekonomisi her yıl karasal birincil bitki üretiminin yaklaşık yüzde kırkını tüketmektedir (Birch, 2001, s. 1). Çevrebilimciler, daha çok insan kaynaklı nedenlerden ötürü türlerin yok olma hızının 100 ila 1.000 kat arttığını ve her gün 100'den fazla türün yok olduğunu söylemektedir (Birch, 2001, s. 1; Sach; 2008, s. 72; Wilson, 1992, s. 280). Jeffrey D. Sachs çarpıcı biçimde, türlerin hızla yok olmasına seyirci kalmanın, onları birer birer uçurumdan aşağı itmekten farklı olmadığını dile getirmektedir (2008, s. 72). Öte yandan, doğa üzerindeki insan etkisinin insan türünün lehine gelişip gelişmediği de oldukça şüphelidir. Geliştiğimizi, ekonomimizi büyüttüğümüzü, üretim ve tüketim hızımızı yükselttiğimizi, daha konforlu bir hayat sürdürdüğümüzü düşünürken, farkında olmadan, diğer türlerle birlikte kendi türümüzü de yok oluşa sürüklüyor olabiliriz. Giderek artan hava, su, toprak kirliliği, zararlı atık ve zehirli kimyasalların hızla çoğalması, ormansızlaşma, çölleşme, betonlaşma, erozyon, yeraltı sularının her geçen gün azalması, küresel iklim değişikliği ve türlerin daha önce görülmedik bir ivmeyle yok olması insan türünün doğayı nasıl tahrip ettiğini inkar edilemez biçimde gösteren kanıtlardır.

Bazı düşünürler artık bizim doğanın efendisi olma düşünü bir yana bırakıp, onunla uyumlu bir biçimde yaşamayı öğrenmemiz gerektiğini söylemektedir. Bazıları hayvanların da bizim gibi hakları olduğunu, bu nedenle insan haklarını gözettiğimiz gibi, hayvan haklarını da gözetmemiz gerektiğini belirtmektedir. Bazıları ise, yalnız insan ve hayvan haklarına özen göstermenin mevcut sorunları çözmeye yetmeyeceğini, ahlaki sorumluluk alanımızı tüm doğayı kapsayacak şekilde genişletmemizin zamanının geldiğini dile getirmektedir. Onlara göre, doğaya karşı olan yükümlülüklerimizi yerine getirmez, kısa sürede gerekli önlemleri almazsak, bunun ahlaki

sorumluluğu ve vebali biz ahlaki aktörlerin üzerinde olacaktır. Zira, doğanın gidişatı, bu gidişat üzerindeki rolümüz ve onu nasıl tersine çevirebileceğimiz konusunda bilimciler ve düşünürler onlarca yıldır bizi yeterince bilgilendirdiler.

II

Aldo Leopold, endüstriyel büyümenin neredeyse kutsal bir hedef olarak görüldüğü bir zamanda, ahlaki sorumluluk alanımızın, sadece hayvanlara, canlı varlıklara değil, toprağı, suyu, sazlığı ve bataklığıyla tüm doğaya genişletilmesi gerektiğini, muhtemelen ilk kez, açıkça dile getirdi. Onun evrimsel ahlak anlayışına göre insanlık, ahlakın evriminde üçüncü aşamanın eşiğine geldi. İlk iki aşamada diğer (insan) bireylerle ve bireyler ile toplum arasındaki ilişkilerimizi düzene koymayı öğrendik. Ona göre, artık, genel olarak doğa ve doğanın insan dışı üyeleriyle de ilişkimizi düzenleyecek yeni bir ahlak anlayışına ihtiyacımız olduğu ortaya çıkmıştır.

Leopold bu yeni ahlak anlayışını toprak etiği olarak adlandırır. Doğanın genel durumu ve ekolojik veriler dikkate alındığında, bu yeni aşamanın yalnızca evrimsel bir olasılık değil, aynı zamanda ekolojik bir zorunluluk olduğu da görülebilir (Leopold, 1966, s. 239). Leopold'a göre, var olan ekolojik sorunların çözümü, ahlaki aktörlerin, yalnız insanın değil tüm doğanın ahlaki olarak düşünülmeye değer olduğunu kabul eden bir ahlak anlayışını benimsemesiyle mümkün olabilir.

Bu anlayış, bize, yalnız kendi türdeşlerimizle kurduğumuz ilişkilerimizde değil, genel olarak doğa ve insan dışı varlıklarla kurduğumuz ilişkilerimizde de doğru olanı yanlış olandan ayırabilme becerisi sağlayabilmelidir. Bilindiği gibi, doğruyu yanlıştan ayırma becerisini genel olarak vicdan olarak adlandırıyoruz. Doğa ve insan dışı varlıklarla olan ilişkilerimizde de doğruyu yanlıştan ayırabilmemiz gerekir ve Leopold buna "ekolojik vicdan" demektedir. Ona göre, çevre ve genel olarak doğa sorunlarını çözüme kavuşturabilmek için, biz insanların, yaptırım gücü olan pozitif yasalardan çok, ekolojik bir vicdan geliştirmeye gereksinimimiz vardır.

III

Leopold'un düşünceleri J. Baird Callicott'u oldukça etkilemiştir. Callicott kendini toprak etiğinin dünya çapında bilinmesi ve onun felsefi temellerinin oluşturulmasına adamış

felsefecilerin en başında gelir. Callicott, Leopold'un görüşlerini, genel olarak Hume ve Darwin'in ahlak anlayışları ve kuantum teorisinin kimi yorumlarından aldığı esinle güçlendirmeye çalışmış ve insanmerkezci olmayan bir değer kuramına dayalı özerk bir çevre etiği oluşturabilmeyi hedeflemiştir.

Leopold bizi, doğanın "felsefi anlamda değerini" anlamaya ve takdir etmeye çağırır (1966, s. 261). Callicott'a göre, Leopold'un bu ifadeyle kastettiği doğanın özsel değeridir. Biyotik topluluğun, bu toplulukta yer alan insan dışı varlıkların, ekosistemlerin, genel olarak tüm doğanın ve bileşenlerinin, tıpkı insanlar gibi özsel değeri olduğunu göstermek, Callicott'un en önemli hedeflerinden biri olmuştur. Zira, ona göre, çevre etiğinin uygulamalı etik statüsünden kurtularak özerk hale gelmesi, ancak doğa ve bileşenlerinin özsel değeri olduğunun kabul edilmesiyle ve insan dışı varlıkların da insanlar gibi ahlaki nesneler olarak görülmesiyle mümkündür.

Diğer taraftan, insanmerkezcilik kavramı, biz insanların doğa üzerindeki yıkıcı etkisini bizlere anımsatıp, bizi doğa üzerindeki mevcut konumumuzu sorgulamaya teşvik ederek önemli bir işlev görmüştür. Ancak bunun dışında, var olan sorunların çözümüne ne kadar yardımcı olduğu tartışmalıdır. Mevcut çevre ve doğa sorunlarının ana nedeni gerçekten insanı merkezde tutan ahlak anlayışları olabilir mi? İnsanmerkezcilik kavramı haksız biçimde tüm insanların bu sorunlardan eşit olarak sorumlu olduğunu düşündürtmektedir. Kuşkusuz, mevcut doğal ve çevresel sorunlardan en çok hangi tür sorumludur diye sorulduğunda alınacak yanıt bellidir. Ama oldukça farklı sosyoekonomik kesim ve kültürlerde yer alan, yedi milyarlık bir topluluktaki tüm bireylerin, tek vücut halinde yeryüzündeki yaşamı hep birlikte yok etmeye çalıştığını düşündürten bir kavram sorunlarımızın çözümüne yardımcı olabilir mi? Her birimiz, doğa üzerindeki insan kaynaklı etkiden eşit biçimde mi sorumluyuz? Aldığı ücretle ailesini zar zor geçindiren bir işçinin, kullandığı üretim yönteminin doğaya olan etkisini dikkate almadan elde ettiği kârı çoğaltmaya çalışan bir işverenle aynı düzeyde sorumlu tutulması adil olabilir mi? Karşı karşıya bulunduğumuz devasa sorunları yalnızca yeni kavramlar üreterek açıklamaya çalışmak yerine, bu sorunlara yol açan ana nedenleri, toplumsal, kütürel, ekonomik, politik, bilimsel ve teknolojik mekanizmaları sorgulamamız sorunların çözümünde çok daha etkili olabilir.

Leopold'un, Callicott'un inanmak istediğinin aksine, insanmerkezci olmayan bir ahlak anlayışı önerdiği söylenemez. Kuşkusuz, Leopold, doğanın insan ile bitki, hayvan, toprak, hava, su vb. insan dışı unsurları arasındaki ilişkileri düzenleyecek ve uyumlu hale getirecek bütüncül bir ahlak anlayışını savunuyordu. Dahası, insana kendinden menkul özel bir değer yükleyerek insanların doğayı sorumsuzca tahrip etmelerine göz yuman anlayışları şiddetle eleştiriyordu. Bunların ötesinde, tüm doğanın sağlığının korunmasına yönelik adımlar atılması onun için çok önemliydi. Ama öte yandan, Leopold, insanın gereksinim ve çıkarlarının sağlanması gerektiğini, bu insan dışı varlıkların aleyhine olacak olsa bile, hiçbir zaman göz ardı etmedi. Elbette, haklarımızı, gereksinim ve arzularımızı karşılarken, bunların tüm doğa üzerindeki etkilerini dikkate almadan hareket etmemeliydik. Bu nedenle, Leopold her zaman, insanların giderek artan taleplerinin karşılanması ile tüm doğanın sağlığının korunmasını birlikte hesaba katan bir orta yol bulmaya çalışmıştır. Onun sıkça vurguladığı gibi, doğanın korunması, insan ile doğa ya da doğanın yararları ile güzelliği arasında bir uyum sağlamayı hedeflemelidir.

Leopold'un toprak etiği anlayışında değer kavramı elbette önemli bir yere sahiptir. Ancak Leopold, Callicott'un düşündüğünün aksine, doğa ve bileşenlerine özsel değer yüklemez. Onun, doğa ve bileşenlerine çok farklı isimler altında yüklediği değerler genellikle insan gereksinim ve çıkarlarına hizmet eder. Leopold'un doğayla ilgili estetik anlayışı da insan merkezlidir ve genel olarak insan iyiliğini esas alır. Onun dediği gibi, doğa bize hasat edebileceğimiz sayısız estetik ürünler sunar (1966, s. xix). Ona göre, bizi doğayla ilişki kurmaya iten esas neden, bundan aldığımız hazdır (s. 283). O, doğa estetiğini, insanların doğayla olan deneyimleri sırasında elde ettikleri farklı tatmin duyguları olarak algılamaktadır.

Diğer taraftan, Callicott'un insan dışı varlıkların özsel değerli olduklarını gerekçelendirmek için ileri sürdüğü görüşler, çevre etiğinin özerkliği için zorunlu gördüğü insan merkezci olmayan bir değer kuramına ulaşma konusunda fazla umut verici görünmemektedir. Ayrıca, Callicott'un özsel değerin araçsal ya da dışsal değerden daha fazla normatif güce sahip olduğu inancı tartışmaya açıktır. Varlıklara yüklediğimiz değerler, biz insanları eyleme geçme konusunda güdüleyebilir. Ancak hangi tür değerin daha çok güdüleyici olduğu kişilerin karakter ve gelişimlerine bağlı olarak değişebilir. Callicott, bu konuda, özsel değerin araçsal değerle kıyaslanamayacak denli üstün olduğuna inansa da, değerlerin normatif gücü kişilerin biyopsikososyokültürel ve bilişsel gelişimlerinden bağımsız düşünülemez. Callicott veya başkaları, varlıkların araçsal değerleri olup olmadığına bakmaksızın, salt özsel değerleri

olduğuna inandıkları için, bu varlıkların korunması için mücadele edebilir. Başkaları da böyle bir çaba için, söz konusu varlıkların kendileri ya da insanlık için bir değeri olup olmadığını sorgulayabilir. İkinci tutum birincisine göre daha insanmerkezcidir, ama gayri ahlaki değildir. Çevre etiğinin beklenti ve hedefleri göz önüne alındığında birini yüceltip diğerini dışlamak makul görünmemektedir.

Ayrıca, Leopold eserlerinde, sık sık “iyi yaşam,” “topluluk refahı,” “insan refahı,” kavramlarına gönderme yapmakta, doğanın niçin korunması gerektiğini bu kavramlarla ilişkilendirmektedir. Ona göre, doğa bizim kendimizi gerçekleştirmemizin aracıdır (1933b, s. 191). Dolayısıyla, doğanın korunması için mücadele etmenin gayesi, genel olarak insanların da mensubu olduğu bütün yaşam topluluğunun, özel olarak da insanlığın refahını, mutluluğunu sağlamaktır. Demek ki, Leopold doğanın ve doğal varlıkların korunmasının aslında iyi yaşam idealine hizmet ettiğini düşünmektedir. Zira bütünlüğünü, sağlığını ve güzelliğini yitirmiş bir doğada iyi yaşam hedefini gerçekleştirmek mümkün olmayacaktır. O halde, doğanın insan dışı unsurlarının ahlaki nesneler olarak görülmesi ve insanların doğanın korunması konusunda teşvik edilmesi, insan dışı varlıklara özsel değer yüklemeden de mümkün olabilir.

Ama bu durumun, doğa ve bileşenlerine özsel değer yüklenmesi gerektiğini savunanlar ile onlara dışsal ya da araçsal değer yüklemenin yeterli olduğunu düşününler arasında bir karşıtlık oluşturması gerekmez. Leopold insanlara ve insan dışı varlıklara özsel değer yüklemediği halde, böyle yapmak isteyenlere muhtemelen karşı çıkmazdı. Onun deyişiyle, henüz bir cenin konumunda olan doğa korumacılığı hareketinin büyütülmesi, çok farklı biyopsikososyokültürel ve bilişsel özelliklere sahip insanları, doğa ve bileşenlerine değer yükleme konusunda serbest bırakarak daha güçlü bir biçimde sağlanabilir. Başka bir ifadeyle, doğa korumacı hareket, özsel ve araçsal değerden birlikte yararlanarak daha çok güçlendirilebilir.

IV

Leopold insana, onun deyişiyle, “özel kozmik bir değer” yüklemekten yana değildir (1923, s. 97). Çünkü böyle bir değer yüklemenin, insanın doğayı sorumsuzca kullanmasına bir dayanak oluşturduğunu düşünmektedir. Kuşkusuz, insan türünün de, tıpkı diğer türlerde olduğu gibi, ayırt edici özellikleri olduğunun farkındadır. Ama o, bu özelliklerin arasından yalnızca birkaçının, insanı diğer türlere göre üstün kıldığına inanır. Ona göre, insanı diğer türlerden üstün kılan

özellikler, onun ahlaki özne ya da ahlaki bir aktör olmasını destekleyen özellikleridir. Onun anlayışına göre, ahlaki bir varlık olarak insan, bazı dinsel ve sözde-bilimsel görüşlere dayanarak kendine özel önem yükleyip insan dışındaki doğayı sorumsuzca kullanmaz; içgüdülerini, gereksinimlerini, arzularını tatmin ederken yapıp ettiklerinin mensup olduğu farklı toplulukları nasıl etkileyeceğini dikkate almazlık etmez. Leopold ısrarla, doğanın bize değil, bizim doğaya ait olduğumuzu vurgular. Bu nedenle, ahlakın nesnesi olmayı, yalnızca insana yüklenen "özel kozmik" değerlere dayandıran anlayışların aksine, o, insanı ahlakın öznesi yapan özellikleri öne çıkarır. Ona göre, bizim tür olarak üstünlüğümüz, bizim dışımızdaki varlıklar için sorumluluk kabul etme yetimizde ya da yalnızca insanların değil doğanın tüm unsurlarının saygı gördüğü bir toplum kurma potansiyelimizde saklıdır. Başka bir deyişle, Leopold'a göre, bizi diğer varlıklardan ayıran ve üstün kılan en önemli yanımız, sorumluluk alanımızı sürekli olarak genişleten ahlaki özneler olmayı başarabilmemizdir.

Homo sapiens yeryüzünde, üyelerinin büyük çoğunluğu ahlaki özne olma potansiyeline sahip biricik tür olarak gözükmektedir. Ahlaki özneler olarak biz insanlar, hem kendi ahlaki sorumluluk alanımızı genişletebilir hem de ahlaki özne olmayan varlıkların ahlakın nesnesi olup olmadıklarına karar verebiliriz. Ahlakın nesnesi olabilmek için ahlaki özne olmak zorunlu bir koşul değildir. Bunun en açık kanıtı, insanların ancak belli bir kısmı ahlaki özne olduğu halde, günümüzde tüm insanların, en azından ilkesel olarak, ahlaki nesne olarak kabul edilmesidir. Ama insanlık tarihi, yamyamlık, kölelik, ırkçılık, faşizm, işkence, savaş gibi türlü araçlar yoluyla, ahlaki özne olma kapasitesine sahip olsun ya da olmasın birçok insanın, ahlaki nesne olduklarının inkâr edildiği ya da görmezden gelindiği örneklerle doludur. Çekilen birçok acının ardından, tarihsel gelişimimiz içinde bu kötülüklerin büyük çoğunluğunun üzerinden gelebildik ve bugün, dini, dili, ırkı, cinsiyeti, toplumsal kökeni, fiziksel ve zihinsel kapasitesi vb. ne olursa olsun, tüm insanların, hiç değilse ilkesel olarak, eşit ahlaki varlıklar olduklarını kabul ediyoruz. Sonuç olarak, yalnızca insanlar ahlakın nesnesidir varsayımı doğru değildir. Doğru olan, insan türünün yalnız bazı üyelerinin ahlakın öznesi olduğudur. Leopold'un toprak etiği anlayışı bize, tıpkı niteliklerine ya da ahlaki özne olup olmadıklarına bakmaksızın tüm insanların ahlaki nesne olduklarını kabul ettiğimiz gibi, doğanın insan dışı unsurlarının da ahlaki nesneler olarak kabul edilebileceğini göstermektedir.

V

Leopold'un belirttiği gibi, biz insanlar doğanın değerini, doğal kaynakların sınırsız olmadığını, doğanın ve bileşenlerinin bizim refah ve mutluluğumuz ve türümüzün devamlılığı için vazgeçilmez olduğunu kavradıktan sonra anlamaya başladık. Doğayı, en azından şimdiki ve gelecek kuşakların refah ve mutluluğu için korumamız gerektiğini görmeye başladık. Eğer kendimizin yalnız insan topluluğunun değil, biyotik topluluğun da üyesi olduğumuzu kavrayabilirsek, doğanın insan dışı unsurlarının da, tıpkı tüm türdeşlerimiz gibi, ahlaki olarak düşünülmeye değer olduklarını anlayabiliriz.

Şimdilik, doğanın her geçen gün nasıl yok olduğunun acısını yalnızca bazı türdeşlerimiz bilinçli olarak hissediyor. Onlar doğa korumacılarıdır. Leopold'a göre, onlar doğa koruma hareketinin ceninini oluşturuyorlar. O, bu ceninin olgunlaşarak, insanlığı, ahlakın evriminde üçüncü aşama olarak gördüğü toprak etiğine, yani doğanın insan dışı varlıklarının da ahlaki nesneler olarak görüleceği bir anlayışa, taşıyacağını umut etti. Ona göre, insanlarda doğa bilinci yaygın olarak var, ama bu bilinç henüz onları doğanın korunması konusunda harekete geçirecek kadar güçlü değil. Onun, doğa koruma hareketinin ya da toprak etiği anlayışının çekirdeğini oluşturan doğa korumacılarından beklediği, insanlardaki bu henüz etkin olmayan bilinci harekete geçirip insanlığı, ahlaki evrimin üçüncü aşaması olarak gördüğü toprak etiğinin gerekliliğine inandırmak için yeterli çaba göstermeleridir.

Leopold hem teknoloji hem de etiğin insan icadı olduğunu söyler. Ona göre, insanlar arka arkaya aletler icat edip geliştirirerek doğanın taşıma kapasitesi yasalarını kendi türleri için askıya almayı başardılar. Böylece belirli bölgelerde, o bölgenin doğal taşıma kapasitesinin üzerinde insanın varlığını sürdürebilmesi mümkün oldu. İnsanlar etiğin icadıyla da kendi türdeşleri arasındaki yırtıcı rekabet yasalarını askıya alarak ya da yumuşatarak görece barış içinde yaşayan toplumlar oluşturmayı başardılar. Barış durumu zaman zaman kesintiye uğratılıp vahşi doğal rekabet düzenine dönülse de genel olarak bu iki icat sayesinde insanların doğa üzerindeki hakimiyeti güçlendi (Leopold, 1941a, s. 283).

Uzun süre, teknoloji yardımıyla doğanın insan taşıma kapisetesini sürekli arttırabileceğimizi ve barışı da sürekli mümkün kılabileceğimizi düşündük. Ama zaman içinde, doğanın ve alet kullanarak taşıma kapasitesi yasalarını askıya almanın sınırları olduğunu öğrenmeye başlayınca,

etik anlayışımızı geliştirmemiz gerektiğini ya da yeni bir etiğe gereksinimimiz olduğunu anlamaya başladık. Dolayısıyla, bu anlamda, toprak etiği ve genel olarak çevre etiği, bir zorunluluk olarak ortaya çıktı. Zira, doğanın, aslında bizim iyiliğimiz için, kalıcı olarak korunması gerektiğini idrak etmeye başlamıştık.

Yeni bir etik anlayışına ihtiyacımız var, çünkü hakim olan mevcut etik anlayışlar, bizim ile doğanın insan dışı unsurları arasındaki ilişkileri gerektiği gibi düzenleme yeteneğine sahip değiller. Leopold bize bilgece, ahlaki sorumluluk alanımızı doğanın insan dışı üyelerini de içine alacak biçimde genişletmemizi önermektedir. Bu öneri hem evrimsel hem de felsefi açıdan gayet makul görünmektedir. Zaman içinde etik anlayışımızı sürekli geliştirdik; ahlaki sorumluluk alanımızı devamlı genişlettik. Dolayısıyla, bu anlayışımızı insan dışı varlıkları da dahil ederek bir üst düzeye taşımamız pekâlâ mümkündür. Leopold, insan dışı varlıklarla ilişkilerimizi düzenlemede bize rehber olacak yeni bir etiğin, ekolojik açıdan gerekli olduğunu da söylemektedir. Çünkü artık yalnız teknolojik ilerleme yoluyla doğal kaynakların sürekliliğini sağlayamayacağımız ortaya çıkmıştır. Bunu yapabilmemiz için, etik anlayışımızı da geliştirmemiz ve tür olarak varlığımız ve mutluluğumuzun doğanın bütünlüğü ya da sağlığının korunmasıyla mümkün olabileceğini anlamamız gerekmektedir.

Ancak ahlaki aktörlerin büyük çoğunluğunun karşılıklı olarak ilkeleri üzerinde anlaşamadığı bir etik anlayışın etkili olması mümkün değildir. Leopold'un belirttiği gibi, var olan sosyoekonomik düzen böyle bir anlaşmayı desteklemekten ve güçlü bir doğa ya da toprak bilinci oluşturmaktan uzak görünmektedir (1966, s. 261). Ama Leopold, var olan düzeni tasvip etmemekle birlikte, onu değiştirme konusunda aceleci görünmez. Daha çok, evrimsel bir değişimden yana durur. Ona göre, öncelikle tüm insanlığa yayılacak bir ekolojik vicdan ve bilinç geliştirmeye gereksinimiz vardır. Ancak bu sayede, tüm aklımız ve kalbimizle, makul bir neden olmaksızın insan dışı varlıklara zarar vermenin yanlış olduğunu idrak edebiliriz; tıpkı, hangi özelliklere sahip olurlarsa olsunlar, türdeşlerimize zarar vermenin, onları incitmenin yanlış olduğunu idrak ettiğimiz gibi...

Diğer taraftan, Leopold doğa korumacılığının ancak insanlar tarafından ve "insanların egemenliği altında" gerçekleştirilebileceğinin farkındadır (1942c, s. 199). Başka bir deyişle, insan ile toprak ya da doğa arasında uyumu hedefleyen doğa korumacılığı, bir insan faaliyetidir ve insancıl bir faaliyettir. Her ne kadar, karşı karşıya olduğumuz doğa ve çevre sorunları

çoğunlukla insan kaynaklı faaliyetler sonucu ortaya çıkmış olsalar bile, bu sorunları çözme kapasitesine yalnızca insan türü sahip görünmektedir. Doğayı biz insanlar yaraladık, ama bu yaraları tedavi edebilecek yeryüzündeki biricik tür de yine biz insanlarız. Aslında, türümüzün varlığını refah ve mutluluk içinde sürdürebilmesi de bizim bir an önce bu yaraları iyileştirmek için harekete geçmemize bağlıdır.

VI

Kuşkusuz, hiç insan müdahelesi olmasa, doğa yaralarını, kendi dinamikleriyle, daha etkin ve hızlı biçimde iyiliştirebilirdi. Ama ahlakın nesnesi olan insanlar için bu bir seçenek olarak görülmemelidir. Leopold için bu hiçbir zaman üzerinde durmaya değer bir seçenek olmadı. O, ne insansız bir dünya hayal etti, ne de insanlarla insan dışı varlıkların ahlaki olarak eşit düzeyde görülmesini önerdi. Leopold'un dediği gibi, "bir dağ gibi düşünebilir," doğaya analitik bir uzaklıktan, örneğin, bir dağın zirvesinden bakabilirsek, doğanın insan dışı birçok üyesinin, doğanın ya da toprağın sağlığının korunmasında bizden çok daha hayati rolleri olduğunu takdir edebiliriz (1966, s. 140).

Ama bunu fark ettiğimiz için, doğanın bütünlüğünün, istikrarının ve güzelliğinin korunmasına hizmet etmeyen, ama bizim için iyi olduğunu düşündüğümüz birçok insan faaliyetinden vaz mı geçmeliyiz? Örneğin, insan yaşamı ve sağlığı ile ilgili araştırmalar yapmaktan, insanın yaşamını daha uzun ve kaliteli sürdürmesini sağlayacak yollar aramaktan, gelişmiş hastaneler ve araştırma merkezleri kurmaktan, pek çok bilim, sanat ve spor etkinliğinden vb. vaz mı geçmeliyiz? Leopold, doğanın insan dışı unsurlarının doğanın bütünlüğü ve sağlığının korunması bakımından önemini en iyi takdir edenlerin başında gelmesine karşın, gereksinim ve çıkarlarının tatmin edilmesi konusunda insanlarla insan dışı varlıkları bir tutmadı. Bir pratik akıl insanı olarak, o her zaman, doğanın ya da toprağın sağlığının korunması ile insan gereksinim ve çıkarlarının yeterli biçimde karşılanması arasında bir denge bulmaya çalıştı.

Toprak etiği, en çok, bireysel insan haklarını, bütünün, yani doğanın iyiliği için feda etmeye hazır olduğu gerekçesiyle eleştirilmiştir. Bu gerekçeyle toprak etiğinin, ekofaşizm diye adlandırılan bir tür faşizme kapı araladığı dile getirilmiştir. Bu eleştirileri en çok Callicott göğüslemeye çalışmıştır.

Callicott bu eleştirileri, önce toprak etiğinin var olan insan etiğini dışlamadığını, yalnızca ilaveten yeni düzenlemeler önerdiğini savunarak karşılamayı denedi. Ona göre, bizim tüm doğanın korunması için sorumluluk üstlenmeyi kabul etmemiz, ailemize ya da türdeşlerimize olan sorumluluklarımızı yerine getirmemize engel değildir. Farklı toplulukların üyeleri olarak, bu toplulukların mensuplarına karşı yükümlülüklerimizi bir öncelik sırasına göre gerçekleştirebiliriz. Bu yükümlülüklerin çakışması durumunda, örneğin ailemize olan yükümlülüklerimiz, komşularımıza, yakınlarımıza, vatandaşlarımıza, genel olarak türdeşlerimize ve son olarak biyotik topluluğun insan dışındaki üyelerine olan yükümlülüklerimizden önce gelir.

Ama Callicott'un bu savunması karşılıksız kalmamıştır. Eğer, yakınımızda olanlara daha güçlü olmak üzere, türdeşlerimize olan yükümlülüklerimiz doğa ve onun insan dışı üyelerine olan yükümlülüklerimizden önce geliyorsa, doğanın korunması için yapılması gerekenleri sık sık ertelemenin önü açılmış olacaktır. O halde, toprak etiği kağıttan kaplandan başka bir şey değildir.

Toprak etiğinin karşı karşıya bırakıldığı bu ikilemi – ekofaşizm ya da kağıttan kaplan olma durumu – ortadan kaldırmak için Callicott iki öncelik ilkesi önermiştir. Ama bu ilkeler, hem güçlü ve uygulanabilir hem de, Callicott'un arzuladığı gibi, insanmerkezci ve ekofaşist olmayan bir etik elde etmek için yeterli olmamıştır. Ben bu ikilemin, Leopold'un kendi görüşleriyle de uyumlu olarak, zayıf insanmerkezci bir tutumun benimsenmesiyle giderilebileceğini savunuyorum. Toprak etiği, Leopold'un düşündüğü haliyle, ne ekofaşisttir ne de kağıttan bir kaplandır. Kağıttan kaplan değildir; çünkü çoğunlukla insan faaliyetlerinden kaynaklanan nedenlerden ötürü karşı karşıya kaldığımız doğa ve çevre sorunlarının çözümü için sorumluluk alanımıza insan dışı varlıkları da katmamız gerektiğini, etiğin evriminde yeni bir sıçramaya ihtiyaç olduğunu göstererek, mevcut etik anlayışlara ciddi ve radikal bir seçenek olarak ortaya çıkmıştır. İddia edildiği gibi ekofaşist de değildir, çünkü zayıf insanmerkezcidir. İnsanlarla doğa arasında bir uyum sağlamayı hedeflemektedir. Bu durumun, ekolojik olarak doğru olanın biyotik topluluğun "bütünlüğünü, istikrarını ve güzelliğini korumak" olduğunu söyleyen toprak etiğinin temel ilkesiyle çeliştiği düşünülebilir (Leopold, 1966, s. 262). Ama biyotik topluluğun sade bir üyesi olma düşüncesi ya da toprak etiğinin temel ilkesi ile vurgulanan ekolojik doğruluk simgesel öneme sahiptir; bize doğanın insan refahı ve mutluluğu için vazgeçilmezliğini hatırlatır.

Leopold'un açıkça belirttiği gibi, biz insanlar doğanın ya da toprağın sağlığını korumalıyız; çünkü bu "insan refahı için hayati önemdedir" (1941c, s. 194).

VII

Lopold'la ilgili bir başka tartışma konusu, onun ve savunduğu etik anlayışın "preservasyonist" mi yoksa "konservasyonist" mi olduğu üzerinedir.[61] Leopold eserlerinde her iki terimi ve türevlerini serbestçe birbirlerinin yerine kullanmıştır. Bu iki kavram arasında bilinçli bir ayrım yapıyor gibi görünmemektedir.

Avustralyalı felsefesci John Passmore bu iki kavram arasında yalın ve kesin bir ayrım yapmıştır. Passmore bu ayrımı yaparken, kendilerini doğanın korunması için sorumlu hisseden insanların motivasyonlarını dikkate almıştır. Onun yaptığı ayrıma göre, konservasyonistler, doğanın korunması gerekliliğini, daha çok insan çıkar ve gereksinimleri üzerinden dile getirirler. Onlara göre doğa korunmalıdır, çünkü bu şimdiki ve gelecek kuşakların iyiliği ve refahı için gereklidir. Öte yandan preservasyonistlere göre doğa insanların iyiliği için değil, kendi iyiliği için korunmalıdır. Onlara göre, doğa ve bileşenleri insanın çıkar ve gereksenimlerinden ve değer yargılarından bağımsız olarak değerlidir. Başka bir ifadeyle, onların gözünde doğa ve bileşenleri özsel olarak değerlidir. Dahası, onlar doğanın insan dışındaki üyelerinin de insanlar kadar değerli olduğuna inanırlar. Yani preservasyonistler insanmerkezciliği reddederler.

Leopold erken dönem eserlerinde konservasyonisme preservasyonismden çok daha yakındır. Kariyerinin ilk yıllarında, özellikle toprak ve av hayvanları yönetimi hakkındaki düşüncelerini geliştirip uygulamaya çalışmıştır. Başlangıçta, konservasyonist yaklaşımın babası olarak kabul edilen Gifford Pinchot'nun yararcı ("utilitarian") düşüncelerinden etkilenir. Sonra bu düşünceleri daha geniş bir bakış açısı ile değerlendirip geliştirmeye çalışır. Leopold bazı vahşi doğa alanlarının ("wilderness") korunması gerektiğini savunur. Ama bu alanların kendileri için ya da özsel değerleri olduğu için değil, av, rekreasyon, estetik tatmin, araştırma vb. insani amaçlar için korunması gerektiğini söyler.

[61] Türkçede böyle bir kavramsal ayrım, bildiğim kadarıyla, henüz yapılmamıştır. Kanımca, "konservasyon" doğanın insan çıkar ve gereksinimleri ya da kısaca insan iyiliği için korunması, "preservasyon" ise doğanın, insan için değil kendi için, olduğu gibi, insan tarafından ehlîleştirilmeden korunması olarak düşünülebilir.

Leopold, “Av Hayvanları ve Vahşi Yaşamın Korunması [Game and Wild Life Conservation]” adlı, 1932 tarihinde yayımlanan yazısında, kendisine kuşbilimci T. T. McCabe tarafından yöneltilen sert eleştirileri aynı tonda yanıtlar. McCabe özellikle Leopold’un av hayvanları yönetimi konusundaki düşüncelerini ve avcılığa olan düşkünlüğünü eleştirmektedir. Leopold’un yazısından anlaşıldığı kadarıyla McCabe’nin, Passmore’un düşündüğü anlamda preservasyonisme daha yakın olduğu söylenebilir. Leopold, McCabe’nin sert eleştirilerine karşılık açıkça kendisinin korumacılık (“protectionism”) ile avcılık ve av hayvanları yönetimi arasında bir ara yol bulmaya çalışan (“intergrade”) olduğunu dile getirir. Aslında bu tanımlama onun genel doğa koruma anlayışını oldukça iyi yansıtmaktadır. Zira o her zaman karşıt uçlar arasında bir uzlaşma, bir orta yol bulma arayışında olmuştur. Avcılığa özel bir değer verdiğini her zaman dile getirmiştir. Onun için avcılık doğa sevgisiyle çelişen değil, doğa sevgisini destekleyen bir etkinliktir. Dahası, ona göre, avcılık insanın açlığını tatmin etmek amacıyla yaptığı doğal bir faaliyet olmaktan çok, kültürel, estetik, hatta bilimsel bir faaliyettir.

Leopold, kariyerinin başlangıç yıllarında av hayvanları yönetimine çok önem vermiştir. Av hayvanları popülasyonunu sürdürülebilir düzeyde tutabilmek için farklı yöntemler geliştirmiştir. Ama kısa sürede, av hayvanları ve toprak yönetiminin ancak tüm doğayı kapsayan bir koruma yaklaşımıyla başarılı olabileceğini anlamıştır. Zira av hayvanları ve toprak yönetiminin, doğa korumacılığının yalnızca bir yanı olduğunu görmüştür. Ona göre, doğayı bir bütün olarak ele almayan yaklaşımlar, onun yalnızca belli bir kısmını, örneğin yalnızca bir türü, belli bir toprak parçasını vb. kurtarmayı hedefleyen yaklaşımlar uzun erimde başarısız olmaya mahkumdur.

Diğer taraftan, doğa korumacıları kendilerinin insan topluluğunun ancak küçük bir kısmını oluşturduklarının farkında olmalıdırlar. Bu durumun farkında olmadan, yalnızca kendi kişisel arzularını yansıtan koruma politikaları önermek yerine, geniş halk topluluğunu kucaklayabilecek politikalar önermelidirler. Zira nüfusun büyük çoğunluğu, kuşbilimciler ya da doğa severlerden değil, “ekonomiyi büyütme ulusal oyununu oynamakla meşgul iş adamları, çiftçiler ve Rotari Kulübü üyelerinden” oluşmaktadır (Leopold, 1932a, s. 165). Elbette onlar da etraflarında “kuşlar, ağaçlar ve çiçekler” olsun isterler; ama şurası kesin ki onlara göre “Amerikan Çeliği’nin fiyatı” “mavi kazın ahvalinden” çok daha önemlidir (s. 165). Bütün bunların dikkate alınması gerektiğini düşünen Leopold, doğru yolun “ekonominin çirkin gerçekleri” ile “korumacıların ideallerini” uzlaştırmak olduğuna inanmıştır (s. 168).

Leopold preservasyon ile konservasyon arasında kavramsal bir ayrım yapmasa bile, doğa korumacıları ve onların önerdiği koruma uygulamaları arasında bazı ayrımlar yapar. Ona göre doğa korumacıları kabaca ikiye ayrılabilir. Bir yanda, doğanın tüm bileşenleriyle birlikte düşünülmesi ve doğanın bir bütün olarak korunması gerektiğini savunanlar vardır; öte yanda doğanın insan için yararsız olduğu düşünülen kısımlarını boş verip kısa vadede ekonomik yarar vaat eden parçalarının korunması gerektiğini savunanlar. Ancak Leopold'un doğa korumacıları ve onların önerdiği koruma pratikleri arasında yaptığı ayrımlar, Passmore'un preservasyon ve konservasyon arasında yaptığı kavramsal ayrımdan farklıdır. Zira Leopold'un savunduğu doğa korumacılığı, güçlü biçimde insan gereksinim ve çıkarlarını gözetir. Bir yandan doğanın korunması gerektiğini savunurken, insanların, insan dışı varlıkların aleyhine olsa bile, kendi gereksinim ve çıkarlarına uygun toprak ve av havanları yönetim pratiklerini yürütmesine izin verir. Bütün toprak ve av hayvanları yönetimi pratiklerinin ve genel olarak doğa koruma pratiklerinin "insan egemenliği altında" yürütüleceğini ifade eder (1942c, s. 199). Bu pratiklerden bazıları insan dışı varlıkların zararına, hatta toplu olarak ölümlerine neden olsa da uygulanmasına karşı çıkmaz; bilakis, bu tür uygulamaların gerekliliğini açık açık savunur. Ama insanlara zarar verecek ya da onların yaşamlarını köklü biçimde değiştirecek herhangi bir doğa koruma pratiği önermez.

Leopold, doğa korumacılığını savunurken, ister preservasyon ister konservasyon terimini kullansın, doğa ve bileşenlerinin özsel değerini değil, insan gereksinimleri, refahı ve mutluluğunu esas alır. Doğa koruma pratiklerinin sağlayacağı olası yararların, insanların doğa korumanın gerekliliği konusunda isteklendirilmeleri için kullanılmasında sakınca görmez. Söz konusu yararlar, ekonomik, bilimsel, rekreasyonel ya da estetik olabilir. Leopold doğanın korunmasının gerekliliğini göstermek için gelecek kuşaklarla ilgili ahlaki kaygılarını da sıkça dile getirir. Aslında Leopold'un üzerinde durduğu bu motivasyon kaynakları onun pek çok kez sözünü ettiği iyi yaşam ya da mutluluk hedefini desteklemektedir. Bu nedenle, Leopold'un toprak etiği anlayışına göre, ana hedefin iyi yaşam, doğanın bütünlüğünü, istikrarını ve güzelliğini korumanın da iyi yaşam hedefine ulaşmanın zorunlu bir aracı olduğunu söylemek yanlış olmayacaktır. Biz insanlar doğanın bütünlüğünü, istikrarını ve güzelliğini korumak için çaba göstermeliyiz, çünkü bu en başta bizim kendi iyiliğimiz için bir gerekliliktir.

VIII

Çevre hareketi içinde farklı motivasyonlarla hareket eden bir çok farklı görüş, hatta hizip olduğu bilinmektedir. Bryan G. Norton, çevre etikçileri, çevre bilimcileri ve doğa koruma aktivistlerinin aralarındaki kimi görüş farklılıklarının, onların asgari müştereklerde birleşip birlikte hareket etmelerine engel olmaması gerektiğini savunmaktadır. Ona göre, çevre ve doğa koruma hareketi içinde yer alan farklı görüş ve hizipleri birbirlerine yakınlaştırmanın ("converge") bir yolu da preservasyon-konservasyon, insanmerkezcilik-çevremerkezcilik, özsel değer-araçsal değer gibi kimi ayrımları gidermek, hiç değilse yumuşatmaya çalışmaktır. Bu uzlaşmacı yaklaşımıyla tutarlı olarak, Norton, preservasyonistler ile konservasyonistlerin doğa koruma konusundaki kimi görüş ve motivasyon farklılıklarının, onların pek çok somut doğa koruma pratiği üzerinde anlaşıp birlikte hareket etmelerine engel oluşturmayacağına inanmaktadır. Ona göre, doğanın ve doğal kaynakların insan gereksinim ve çıkarları için korunması gerektiğini savunan bir konservasyonist ile vahşi doğanın olduğu gibi ve insan için değil kendi iyiliği için korunması gerektiğini savunan bir preservasyonistin, birçok doğa koruma pratiğinin uygulanması ve yönetimlerin bu konuda zorlanması için birlikte hareket etmesi pekâlâ mümkün olabilir. Norton'un bu yakınlaşma anlayışı, ("convergence hypothesis") Leopold'un genel uzlaşma anlayışıyla da uyumludur. Leopold'un belirttiği gibi, doğa korumacılığına gönül verenler, farklı görüş ve motivasyonlara sahip olsalar da "doğal yaşamı korumak için," "ayrı baş çekmek" yerine "birlikte hareket edebilirler" (1932a, s. 168).

Norton'un "yakınlaşma anlayışından" da yararlanarak, Leopold'u preservasyonist ya da konservasyonist olarak etiketlemenin yararsızlığını görebiliriz. Leopold'un kendisinin de söylediği gibi, onu, hem preservasyonistlerin hem de konservasyonistlerin arzularını olabildiğince ve birlikte gerçekleştirmeye çalışan bir orta yolcu ("intergrade") olarak görmek daha doğru olacaktır (s. 164). Leopold'un kendisini bu şekilde tanımlaması, Callicott'un, Leopold'un toprak etiğinin ahlaki ilkesinde kullandığı koruma ("preserve") sözcüğünün akıllara getirebileceği kimi olumsuz ya da talihsiz çağrışımlardan duyduğu rahatsızlığı ortadan kaldırma konusunda da yol gösterici olabilir. Bilindiği gibi, Leopold, toprak etiğinin temel ahlaki ilkesinde "bir şey, biyotik topluluğun bütünlüğünü, istikrarını ve güzelliğini korumaya [preserve] eğilimli olduğunda doğrudur, aksi takdirde yanlıştır" demektedir (1966, s. 262). Callicott, bu ilkede geçen koruma ("preserve") sözcüğünün, Leopold'u ve toprak etiğini preservasyonistlerle müttefikmiş gibi gösterdiği için, "talihsiz" olduğunu düşünmektedir (Callicott, 1999i, s. 328).

Ayrıca Callicott, bütün eylemlerimizde toprak etiğinin yukarıda belirtilen ilkesini rehber edinmenin "korkunç ve ölümcül sonuçlara" yol açabileceğini kabul etmektedir (1999a, ss. 12-13). Yukarıda da belirtildiği gibi, Leopold'un temel ahlaki ilkesinin sembolik bir önemi vardır. Leopold, bu ilkenin insan gereksinim ve çıkarları aleyhine bile olsa sıkı sıkıya ve her koşulda uygulanmaya çalışılmasından çok, doğanın korunmasının insanların iyiliği için vazgeçilmez olduğunu vurgulamıştır. Callicott'un da söylediği gibi, Leopold, doğanın lekesiz bir biçimde korunması gerektiğini savunanlar ile pervasızca kullanılmasında sakınca görmeyenler arasında "üçüncü bir doğa koruma modeli" uygulamaya çalışmıştır (Callicott & Freyfogle, 1999a, s. 17). Dolayısıyla, Leopold'u konservasyonist ya da preservasyonist olarak nitelemek doğru değildir. Başka bir deyişle, preservasyon-konservasyon ayrımı Leopold'un toprak etiğini anlama ve doğa ve çevre sorunlarını çözme konusunda katkı sağlamayan yapay bir ayrımdır. Doğa dostlarını preservasyonistler ve konservasyonistler olarak ayırmaya çalışmak yerine, onları birarada tutmaya ve Leopold'un deyişiyle henüz cenin halinde bulunan doğa koruma hareketini büyütmeye çalışmak onun toprak etiği anlayışına daha uygun olacaktır.

IX

Leopold, esas olarak, insan türünün uzun süre ve daha iyi koşullarda bir yaşam sürdürebilmesini hedefleyen insani bir etik anlayışı ortaya koymuştur. Bu anlayış, insanlar varlıklarını sürdürebildikçe bir anlam taşır. İnsanların olmadığı bir dünyada ne toprak etiğinden ne de başka bir tür etikten söz etmek anlamlı değildir.

Bugünkü durumda, insanın doğa üzerindeki etkisi, Leopold'un benzetmesinde olduğu gibi, patatesi tüketirken kendini de tüketen patates böceğini anımsatmakatadır (1923, s. 97). Biz insanların patates böceklerinden farkı, bizlerin, hiç değilse şimdilik bazılarımızın, bu durumu görmeye ve değiştirmek için bir şeyler yapmaya başlamış olmamızdır.

Leopold'un toprak etiği, bize, ahlaki sorumluluk alanımızı insan dışı dünyayı da içine alacak şekilde genişletmemiz gerektiğini söylemektedir. Dürüst olmamız gerekirse, yedi milyar insan bir biçimde ortadan kalksa, doğanın kendi kendini çok daha hızlı bir biçimde iyileştirebileceğini, biz insanların açmış olduğu yaraları hızla kapatabileceğini söylemek büyük bir kehanet olmaz. Başka bir ifadeyle, ne kadar insan karşıtı gibi görünürse görünsün, diğer koşullar aynı kalmak kaydıyla, insan türünün yok olmasının, doğanın bütünlüğünün, istikrarının ve güzelliğinin

korunmasına oldukça güçlü bir katkı sağlayacağı açıktır. Dahası, dürüstçe bir karşılaştırma yaparsak, doğanın ya da biyotik topluluğun iyiliğini sağlama konusunda, insan türünün yok olmasının, ahlakın öznesi olan insanların insan dışı doğanın da ahlakın nesnesi olduğunu kabul etmesinden daha etkili olabileceğini görürüz.

Bu insan karşıtı yaklaşıma, doğanın insanlarla birlikte güzel olduğu söylenerek itiraz edilebilir. Ama bu "insanmerkezci" bir retorik olmaktan daha fazla bir anlam taşımaz. Zira bilimsel veriler, türlerin yok olma hızının, esas olarak insan kaynaklı nedenlerden ötürü 100 ila 1.000 kat arttığını göstermektedir. Dolayısıyla, insan türünün olmadığı bir dünyanın, insanların varlığını sürdürdüğü bir dünyaya kıyasla çok daha çeşitli, çok daha istikrarlı, sağlıklı ve güzel olacağını tahmin edebiliriz.

Ama Leopold, doğanın bütünlüğünün, istikrarının ve güzelliğinin korunabilmesi için insan dışı varlıkların topluca öldürülmesini güçlü biçimde desteklediği halde, ünlü ahlaki ilkesine rağmen, bu ya da benzeri bir doğa koruma eylemini, doğal taşıma kapasitelerini çoktan aşmış olan insanlar için hiçbir zaman dile getirmemiştir. Yukarıda belirtildiği gibi, Callicott da toprak etiğinin ahlaki ilkesinin sıkı sıkıya uygulanması durumunda ortaya çıkacak sonuçların "tiksindirici korkunçluğunun" ve "kabul edilemezleğinin" farkındadır (Callicott, 1999a, s. 13; 1999j, s. 181). Tekrar vurgulamak gerekirse, Leopold'un ünlü ilkesi önemlidir, ama simgeseldir. Bu ilkeyi, insanın da içinde olduğu doğanın bütün üyelerine tamamıyla nesnel ve eşitlikçi bir biçimde uygulayamayız. Zaten ilkeyi dile getiren Leopold'un da bizden böyle bir beklentisi yoktur. Toprak etiğinin ahlaki ilkesi, bir ahlaki ilkeden beklendiği gibi, bize, kesin ve özlü bir biçimde, doğanın korunmasının, genel olarak yeryüzündeki yaşamın sürekliliği, özel olarak da insan iyiliği için hayati olduğunu çarpıcı biçimde hatırlatmayı hedefler. Sonuç olarak, Lepold'un toprak etiği, bütün etikler gibi, bir insan etiğidir; çünkü öznesi insandır ve doğanın korunması iyi yaşam hedefinin gerçekleşmesi için gereklidir.

Öte yandan, insanmerkezciliği kesin olarak reddeden bir etik anlayışın doğanın sağlığını korumak için ideal olduğu savunulabilir. Kuşkusuz, ahlakın öznesi olan tüm insanlar, Leopold'un dediği gibi bir "dağ gibi düşünebilseler," doğanın sıradan bir üyesi olduklarını ve varlıklarının doğa için diğer varlıklardan daha fazla bir anlam taşımadığını idrak etseler ve özgürlüklerini, türlü gereksinim ve arzularını tüm doğanın iyiliği için kısıtlayacak doğamerkezci bir etiğin ilke ve kurallarına uymayı içtenlikle ve kesin olarak kabul etseler, karşı karşıya

olduğumuz doğa ve çevre sorunları çok daha etkin bir biçimde çözümlenebilir. Ama bilimsel veriler, içinde bulunduğumuz sorunların, insanlığın ideal olanı gerçekleştirmeye ikna olmasını bekleyemeyecek kadar acil ve ağır olduğunu göstermektedir. Elbette Leopold da bütün bunların farkındaydı. Bu nedenle, önerdiği etik anlayışın uygulanabilirliğini her zaman göz önüne aldı ve insan ile insan dışı doğa arasında uyumu olabildiğince mümkün kılacak uzlaşmacı ve gerçekleştirilebilir doğa koruma pratikleri önermeye özen gösterdi. Bu anlamda, doğanın insan iyiliği için korunması gerektiğini söyleyen zayıf insanmerkezci bir toprak ya da doğa etiği, Leopold'un uzlaşmacı anlayışına uygun ve uygulanabilirliği yüksek bir seçenek olarak öne çıkmaktadır.

APPENDIX C

CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Name: Özer, Mahmut
Date and Place of Birth: 1 January 1967, Besni
Phone: +90 536 781 81 41
E-mail: ozermahmut@yahoo.com

EDUCATION

Degree	Institution	Year of Graduation
PhD	METU, Philosophy	2012
MA	Boğaziçi University, Philosophy	2002
BA	Boğaziçi University, Philosophy	1999
BS	METU, Metallurgical Engineering	1989
High School	Besni High School, Besni	1983

WORK EXPERIENCE

Year	Place	Enrollment
1996 June	Kocaeli University	Research Assistant
1990 April	ISDEMIR Iron and Steel Works	Process Engineer

FOREIGN LANGUAGES

English

PUBLICATIONS

Özer, M. (2011). On the Possibility and Necessity of the Land Ethic. *Kaygı*, No. 17, 91-101.

Özer, M. (2011). Değer, Norm ve Çevre Etiği [Value, Norm, and Environmental Ethics]. *Felsefe Dünyası*, No. 53, 192-208.

AREAS OF RESEARCH AND TEACHING INTERESTS

Ethics, meta-ethics, political philosophy, environmental philosophy, history of philosophy, philosophy of science.