CHAPTER ONE

TOWARDS LOWERING THE FOUNDATIONS

************
1.1.0 Ecology: A Lowering of the Foundation

Susane K. Langer in her book *Philosophy in a New Key* has employed an imaginative expression, namely, "the lowering of foundations." It is a very useful expression in describing philosophical activity, for one can meaningfully apply this expression to intellectual reflections that inquire into the foundations of reality. The expression further implies that serious philosophical reflection is not a finished product like a completed edifice, but one of ever widening horizons. Thus, questions of significance in the intellectual epoch of humankind are similar to "the lowering of foundations." And when foundations are lowered, higher and better realizations of human life become possible.

In the growth and development of Western Philosophy one can trace various attempts at "lowering the foundations." The thoughts of the early Greeks, who laid the foundation of the edifice of philosophy, centered around the basic question: What is the structure of the universe? To this central question philosophers from Thales onwards offered various answers. One can trace the development of "the lowering of the foundations" in the reflections of
Plato and Aristotle. Plato's theory of ideas and Aristotle's intuition of substance have laid firm foundations for philosophical reflections from a metaphysical point of view. As we further examine the development of Western Philosophy, the works of Kant have lowered the foundations to an epistemological level. At this realm the questions have centered on what can be known. The Analytic tradition of Western Philosophy lowered the foundations by raising the question: What can we say meaningfully of this universe? Contemporary developments in Phenomenology and Existentialism have still lowered the foundations by offering a different perspective to this search for meaningfulness. Phenomenology and Existentialism have focused on the "Who" that searches for meaning. Hence, human existence and its various dimensions became a serious concern of this mode of philosophizing.

Philosophical reflection did not come to an end with this nor was its foundations firmly laid. We can still trace efforts at "lowering the foundations." Here we would like to take a clue from the imagery of "the lowering the foundations" and develop it in the following manner. We have already noted that the contribution of Phenomenology and Existentialism have been to bring to focus the "who" that searches for
meaning. Philosophers of this orientation have highlighted well that this "who" is not a solus ipse, but manifests the inter-subjective dimension of existence. It is proper that we broaden the implications of the inter-subjective dimension to resonate with the concerns of ecology. The developments in the sciences and the ecological awareness of the last two decades have been so influential that the present age is called an "Age of Ecology." This "Age of Ecology" can be seen as a "paradigm shift" whereby we become capable of thinking beyond a narrow human centered universe. Klaus Kostermaier observes, "Ecology understood as concern for nature in the most comprehensive sense is going to be the master paradigm of the sciences and politics of the future." One need not identify "paradigm shift" with "the lowering of foundations." But as in the case of any "paradigm shift" a centering of ideas helps to deepen the perspectives, so too in ecology a widening of perspectives can be recognized. This process can be seen as a "lowering of the foundations" in the sense that the "who" is understood in its significant interrelationships.

This study is an attempt to understand Martin Heidegger from an ecological perspective. It aims at a
better understanding of the emerging concerns of ecology in the light of Heideggerian thinking. Before entering into the details of the study, it is imperative that we specify some of the emerging concerns of ecology.

1.2.1 Ecology: A Historical Perspective

The term ecology was first referred to by the German Zoologist Ernest Haeckel in 1866. He used the term for the relation of the animal to its organic as well as inorganic environment. The word ecology is derived from the Greek word Oikos, meaning house or habitat. The word ecology appeared in the English language for the first time in 1873 and it referred to a study of the habitation of the organisms. Thus it became a branch of biology and was used as the science of interrelationships between living things and their natural environment.

It is useful to distinguish between environment and ecology. According to the Webster’s Dictionary, environment is "the aggregate of all the external conditions and influences affecting the life and development of an organism." Ecology, on the other hand, is a discipline that deals with the inter-
relationships between living things and other natural environment.

One can meaningfully make a distinction between ecological understanding and ecological awareness. Ecological understanding would broadly refer to the understanding and interpretation of the interrelationships between humans and other organisms of nature in general. And as such ecological understanding is not anything new.

Ever since man became capable of understanding and articulating his life and relationships to nature, he always has manifested an ecological understanding. But ecological awareness, we must affirm, is a contemporary sensibility, and it is a major characteristic of the present century. Before we enter into the details of the present-day ecological awareness, it is proper that we take a look at the salient features of the ecological understanding of the Western philosophical tradition. This will further help us to develop a historical perspective to the whole question. It has become customary in environmental thinking to point out that in the three thousand years of Western philosophizing an ecological outlook has been either irrelevant or incompatible. It may be too harsh to
blame philosophy for this. But the fact remains that philosophy, as the primary source of most of the Western ideas, is in some way responsible for developing ecologically harmful world views. A close look at the origins and developments of some of the leading phases of Western philosophy can clarify this.

1.2.2 The Pre-Socratic Phase

It is the speculations about the natural world that characterizes the Pre-Socratic philosophy. Though they had some strange ideas regarding matters of biology, their speculations about the nature of matter and its interactions with mind were historically important.

Thales of Miletus (640 B.C.) is the first philosopher of whom we have some recorded evidence. Three statements have been attributed to him: (1) The first principle of all things is water, (2) the lodestone has a soul because it draws iron, and (3) all things are full of gods. These remarks, more than shedding light on his philosophical views, reflect the kinds of problems and questions that Thales was concerned with and the assumptions he made about the natural world. For Thales water was the first principle, that out of which all things were made. His
interests in the physical world and its interrelationship with mind are significant. No one may have accepted Thales' position regarding the ultimate substance. But Philosophers after Thales agreed that there was an underlying substance and they offered their own speculations about what it might be. Thus, for Anaximenes the ultimate substance was air, and for Anaximander the "infinite." Pythagoras identified it as "number," while Heraclitus suggested fire, and Xenophanes, the earth. The Pre-Socratic speculations reveal that the physical composition of the world continued to fascinate and puzzle the Western philosophers.

Thales' and other Pre-Socratic's characterization of reality might look a bit outdated today. But their inherent assumption is significant. The point is that 2500 years ago they were able to view the reality around them as having a knowable rational structure. They manifested an enduring optimism in their search for the first principles, confident that everything else would fall into place once it was found. A different type of thinking is found in some Pre-Socratics like Heraclitus and Parmenides who initiated a debate about the nature of motion and change. Heraclitus based his philosophy on change and
maintained that the world was in a flux. Parmenides, on the other hand, denied change and demonstrated the illusoriness of it, basing on his logic. What really existed is the "One." It is in this context that we need to view the reflections of Plato and Aristotle. It is not our intention to enter into the intricacies and nuances of the thinking of these two great philosophers. As philosophers who have influenced and shaped the Western tradition, their thinking is significant in the process of identifying the ecological understanding of Greek phase.

1.2.3 Plato and Aristotle

The very name of Plato brings to mind the celebrated theory of Forms. Forms are not conceptual abstractions but something that possess a quality of being and a degree of reality that is superior to the concrete world. They are the essence of things. What is real is the Form and everything else is real because they participate in the Forms. For instance, something is "beautiful" to the exact extent that the archetype of Beauty is present in it. The theory of Forms enabled the Platonic philosopher to make a distinction between reality and its appearance. It is evident that Plato is indebted to his teacher Socrates who in his ethical
discussions maintained that man as a moral agent requires the Ideas of justice and goodness for good life. So also, in all other fields, be it science or philosophy, absolute Ideas are required to understand the world. And it is by this that chaos, flux and the variety of sensible things can be unified and made intelligible. Plato directs the philosopher's attention away from the external and concrete, from taking things at face value and points to a profound level of reality. One can easily understand that the theory of Forms is an answer to Heraclitus and Parmenides.

Aristotle's philosophy brought Platonism down to earth. The crux of their difference lay in the precise nature of the Forms and their relation to the empirical world. Aristotle took the empirical world on its own terms and considered it fully real. True reality was, for him, the perceptible world of concrete objects and not an imperceptible world of eternal Ideas. He advocated the doctrine of Categories which maintained that a thing can be predicated in many ways. And the many ways of to be inheres in substance which is the primary reality. The real world for Aristotle, is one of individual substances. Substances are distinct from each other and function as substrata for accidents.
The primacy of substance did not ignore the place of the universal. The universal, for him, is conceptually distinguishable from the concrete individual, but is not ontologically independent. According to him, Plato confused categories such as quality with substances. Aristotle maintained that substances are the primary realities and categories such as quality are abstractions which are based on a real aspect of the substance in which it inheres. The emphasis on the concrete reality made Aristotle focus on the problems of life and this world.

In Aristotle and Plato together, then, we find a certain elegant balance and tension between empirical analysis and spiritual intuition... with Plato pointing upward to the heavens, to the invisible and transcendent, while Aristotle motions his hand outward and down to the earth, to the visible and immanent.

What does this Greek phase of philosophy convey regarding the understanding of ecology? Obviously we should not find fault with them for not thinking from the perspectives of today. But it is clear that their philosophical emphases would not have considered an understanding of ecological relationships in nature to be important. In a world dominated by the search for ultimate principles, an understanding of objects that
deals with ecological relationships could at best be an opinion. Moreover, they studied physical elements not as phenomena but as substitutes for ultimate elements. Their suspicion of change led them to view nature, the seat of change, as superfluous phenomena that veiled reality and did not partake of it in any significant degree.

Among the Greek philosophers it is Aristotle who came close to approaching nature from an ecological perspective. Though his interest was metaphysics, he maintained that the study of ultimate substances must be supplemented by the investigation of natural objects, plants, and animals. This shift of focus helped Aristotle to do pioneering work in biology and botany. However, his emphasis on metaphysical principles of finality, and his perception of the hierarchy of living organisms made him view their existence for the sole purposes and interests of humans.

The Greek philosophers appear to have a deep appreciation and admiration for nature and the world around. The beautiful was often a serious point of discussion for them. Plato was able to fuse the metaphysical, the aesthetic, and the ethical together
in his concept of the ultimate Form, the Beautiful and the Good. Plato's Dialogues occasionally show that he greatly appreciated nature, but his general philosophical view forced him to ignore the world of nature or treat it contemptuously. In his Dialogue, Phaedrus, there is a passage referring to genuine delight in nature. However, the superficiality of their delight in nature is revealed in his statement which says, "You must forgive me, dear friend; I am a lover of learning, and trees and open country won't teach me anything." Plato's commitment to the theory of forms led him to an antipathy to natural objects. Since the reality of existence is measured by the degree of participation in Forms, those things without proper participation in Forms do not exist significantly.

1.2.4 The Modern Phase

Anyone familiar with modern philosophy and its orientation would concede the environmental bias reflected in the understanding of ecological relationships. The key philosopher in the modern phase undoubtedly is Descartes. He was admired for his rationalistic bent of mind and disliked for the host of philosophical puzzles that his philosophy gave rise to. The appeal of his philosophy is such that even those
who are critical of him work within a Cartesian framework. It is said that Descartes is not only the father of modern philosophy but he is also the father of modern philosophical problems! The environmental bias that we recognize in modern philosophy is due to its concerns with problems such as the existence of the external world, the nature of natural science and the objectivity of value. Descartes in his most important book, Meditations on First Philosophy, looked for an absolutely certain and self-evident principle to base his reflections. He found it in the cogito. The cogito granted him an intuitive certainty of his existence. This first principle enabled him to argue for the existence of God, other human beings and the external world. What is important from the environmental perspective is the Cartesian legacy. For Descartes there are two types of substances, the res cogitans (the thinking substance) and the res extensa (the extended substance). The thinking substance such as subjective experience, spirit, consciousness, etc. are fundamentally different from extended substance such as the objective world, matter, the physical body, and everything that humans perceive outside the mind. In humans the two realities come together as mind and body. Both these substances are created by God and
since they are fundamentally different, they are incapable of interacting with each other. God was needed not only to maintain the world but also to solve the problem of interaction.

Thus human reason establishes first its own existence, out of experiential necessity, then God's existence, out of logical necessity, and then the God-guaranteed reality of the objective world and its rational order.  

The outcome of such a position was that there was no appropriate context for human involvement and concern. Everything depended on the exercise of the power of God. Moreover, the physical universe came to be viewed as devoid of any purpose or spirit. As purely material object, all physical phenomena came to be comprehended as a machine.

The discussion that we have had so far brought forth the environmental bias reflected in certain traditions of Western philosophy. It is not our purpose to make a detailed inquiry of the various phases of the growth of Western philosophy. However, it is obvious that many influential philosophical concepts have had harmful consequences from the perspective of ecology.
1.3.1 Ecological Awareness

Ecological awareness is a contemporary sensibility and is a major characteristic of the present century. It is an awareness of the wider ecological inter-relationships arising from the increased awareness of the state of the earth. Thus today there is much wider concern than before about the depleting natural resources, the increasing burden of population on the earth, the militarization of the globe, nuclear wastes, ever growing pollution in alarming magnitudes, and the side effects of ever growing technology. The statistics in these fields reveal an alarming picture and so serious minded people wonder about the future of the earth and life in general. According to an internal document prepared in March 1992 by the Ministry of Environment and Forests, Government of India, we are facing a very serious situation vis-a-vis our environment. Today over 250 million children, women and men suffer from mal-nutrition in spite of the increased food production. India has a large population of domesticated animal of around 500 million with a grassland area which is hardly 3.5% of the geographical area. Out of a total area of about 329 million hectares, 175 million hectares of land require special
treatment to restore productivity. Our forest wealth is dwindling due to overexploitation and unsustainable developments. The recorded forest cover is below the required minimum, and the annual rate of loss of forests works out to 47,000 hectares. The loss of habitat is leading to the extinction of many plant and animal species. According to the Botanical and Zoological Survey of India, over 1500 plant and animal species are in the endangered category. These human inflicted wounds on the ecosystems apart, we are facing serious problems of pollution in urban areas. Pollution arising from toxic wastes and non biodegradable consumer articles are on the increase. A large number of industries and other development projects have been badly located. Thus the whole scenario of the environment manifests an imbalance, and this is by Government's own admission.

Ecological awareness, arising out of reflection on contemporary situation, has lead to popular responses known as environmental movements. They radically question the frameworks, assumptions and presuppositions of a human-centered paradigm. The literature that comes out in this area are numerous. For instance, a book by Donald Edward Davis gives an annotated bibliography of 283 books, 33 periodicals, 18
organizations related to the intersection of philosophy and ecology! From this one can imagine the growth of publications in this area in the last four or five years. Today in contemporary social and political life the environmental movements have become a significant phenomenon.

1.3.2 'The Silent Spring'

The awareness of the ecological problems and the consequent birth of environmental movements in the field of ecology dates back to the publication of Rachel Carson's *Silent Spring* in the year 1962. The impact of the book was tremendous. For the first time it was able to galvanize public concern over environmental issues. Carson's forceful statements and analysis of environmental issues had far reaching consequences. The book generated fierce controversy and widespread concern. One can gauge its impact from the fact that it remained on the *New York Times* best-seller list for thirty one weeks.

The primary concern of *Silent Spring* was with the damage we cause to the ecological world. But the book had an important impact on another level. It "was also an indictment of our arrogant conception of our place in the larger scheme of things." She concluded that
the control of nature is a phrase conceived in arrogance, born of the Neanderthal age of Biology and Philosophy, when it was supposed that nature exists for the convenience of man. 13

The net effect of such a critique was far-reaching. Many people came to realize that with regard to ecological problems it is not bigger and better technical solutions that are needed, but a "thorough rethinking of our most fundamental attitudes concerning our place in the larger scheme of things." 14

1.3.3 Lyn White and 'Historical Roots'

A rethinking on this topic was initiated in 1966 by Lyn White Jr., an acknowledged medieval historian. He presented a paper to the American Academy for Advancement in Science entitled, "The Historical Roots of our Ecologic Crisis." 15 He gave a persuasive analysis of the Western tradition relying on recent historical scholarship. He established that "the leadership of the West, both in technology and science, was far older than the so-called Industrial Revolution of the eighteenth century." 16 He undertook an analysis of the medieval view of man and nature because our technological and scientific movements gained momentum in the middle ages. According to him, ruthless farming
began in Northern Europe in the middle ages reflecting tendencies of exploitation of nature. "What people do about their ecology depends on what they think about themselves in relation to things around them."17 His central thesis is that man's relation to nature is conditioned by religion. Medieval Christianity, especially the tradition that developed in the Latin West with its linear conception of time, and striking story of creation18 gave emphatically the message that physical creation had no purpose except to serve man's needs.

White argued that "especially in its Western form, Christianity was the most anthropocentric religion the world has seen," and that accordingly "Christianity bears a huge burden of guilt."19

White's paper unleashed a plethora of literature especially in the now famous field of eco-theology. Today, the religious background of the ecological crisis is a much studied topic. In a recent article20 Elspeth Whitney has questioned White's assumptions. According to him White assumes that religion is the fundamental moving force in history. This assumption cannot be accepted as it is. The economic and socio-political factors too are equally important
considerations. Moreover, according to him, White assumed that the medieval Christianity provided the psychic foundations of modern technological inventiveness. It is to be noted that by the year 1978, White himself had modified his views, noting that the reasons for the medieval developments of technology was by no means clear.\(^2\)

We have already noted Lyn White's contribution in bringing to the fore the religious background of the ecological crisis. Since religion is a major force that shapes our relation, it is important to reflect on how religion and ecology are interrelated.

Religion could rightly be described as man's response to the exigency of human condition, in which he is driven to seek security, status and permanence by identifying himself with a reality, greater or more worthy than himself.\(^2\)

It is no doubt that religion plays a vital role in shaping the life of a person in community, in terms of his approach to reality. The great world religions of humanity have been the channels' through which the 'philosophical triangle' -- that of the World, God, and the Other -- got articulated, practiced and maintained. As an enormously influencing factor in personal and
social life, the world religions have shaped and continue to shape people's approach to their environment. More than ever before, this is recognized today. It is not our aim to enter into a detailed discussion of the ecological crisis from the perspective of various world religions. However, as an important influencing factor in the Western tradition and taking into account seriously the observation of White, we propose to deal with the Christian perspective at some length.

1.4.1 Ecology and Religion: The Biblical Perspective

Christianity is the largest of the world religions today. According to a recent survey, out of the five billion human beings in the world today, 1.95 billion are Christians. Muslims come around one billion and Hindus, around 777 million. As the largest living religion, it may not be wrong to say that Christianity for a long period of time shaped the culture of the Western hemisphere. The mutual influence and synthesis of the Judeo-Christian and Hellenistic tradition are part and parcel of their world view.

A word or two about the use of the term 'world view' is in order. In contemporary discussions the term world view is used in such generality that it is often
difficult to fix its meaning. It is quite usual, however, to specify two senses of the term, namely, world view as 'world-image' and world view as 'philosophy of life'. World-image (Weltbild) is a conceptual elaboration of the results of empirical observations into a scientific view of the world. World view as a philosophy of life (Weltanschauung) means a total view of the nature and origin, value and meaning, goal and aim of the world and human life. Weltbild will primarily refer to a picture whereas Weltanschauung will be a view of life in terms of its significance. In this second sense a world view is a world of meaning. It is a specific perspective of any tradition experiencing and expressing itself and its world. It covers all the conscious and sub-conscious activities of the tradition. It is in this perspective alone that certain things make sense and others do not. That is why there is a value system that is specific to that tradition. Our understanding of any perspective, or a creative investigation or the response to any specific question become intelligible when we specify the underlying world view. At the same time understanding the world view of our thoughts and actions is as difficult a process as becoming aware of one's accent. Like our accent these nuances are part of our being and
cannot be easily objectified. It is the listener who is able to notice the styles of our accent. A world view thus is the specific way in which a tradition views the totality of God-world-man.

Though Christianity has existed for two millennia, until recently its influence has been felt mostly in the West. The term "Christian" identifies those who follow the life and teachings of Jesus Christ of Nazareth. The Bible is the Christian scripture which contains the Judeo-Christian story of salvation. This story of salvation began with the life and liberation of the Hebrews from the oppression of the Egyptian rulers and progressively unfolded in the life, death and resurrection of Jesus Christ.

The Christian outlook on reality in many ways is shaped by the Biblical world view. Therefore to understand this, one needs to be familiar with the Judeo-Christian world view. The Judeo-Christian world view is not a monolithic structure but a confluence of various influences. It has been highly influenced by the Near Eastern mythologies, the Canaanite rituals and practices, the Persian religions, and most of all by the Greek philosophy. It is not our aim to enter into a detailed discussion of these aspects. We approach the
Judeo-Christian world view from the perspective of ecology, that is, to understand, evaluate and to see how far this world view is responsible for the ecological disaster of the day.

The Israelites were a nomadic people. Their history began with the legendary patriarchs such as Abraham, Isaac and Jacob who were pastoral people, who with their livestock wandered through the place. The Exodus experience, which is the story of Israel's liberation from the bondage of the Egyptian Pharaoh, shaped them into a people. They were backward in many ways compared to their neighbors. A strong monotheism was the central pillar of the Israelite religion. For them Yahweh was the liberator who freed them from the captivity of Egypt with a mighty hand. This monotheism took strong anthropomorphic forms. Thus they expressed the attributes of Yahweh in human qualities. The exodus experience brought a strong historical perspective and a sense of destiny to the Hebrew theism. The Hebrews conceived the revelations of Yahweh in terms of history. And quite often the strong monotheism came into fierce conflict with their neighbors who practiced other cults. The Hebrew experience was overborne with exposure to the harsh and hostile forces of nature. Nature to them was a foe from whose malice they had to
keep away. The vagaries of nature were looked upon with fear. This primitive experience of the Hebrews has influenced the succeeding generations. The conquest of Canann was an important landmark in their life. They firmly believed that this land was promised to them by Yahweh.

During their forty years of sojourn in the desert, they mustered enough strength to conquer the promised land. The Hebrew dislike for nature reached its high pitch during the conquest of Canann. Canannite practices consisted of nature worship, ritual prostitution, polytheistic worship, snake and bull cults, fertility rites and festivals. However, these contacts brought about some sort of cultural transition too. One can trace the integration between the pastoral cults of the patriarchal religion with the agrarian Cananite cults.

The prophetic tradition in Israel must be viewed in this background. The monarchical form of government and the deviation from the Yahwehism enabled the prophets to be critical of the establishment. The great exile of 587 B.C. shattered their faith in their capabilities and achievements. The loss of the temple, and the downfall of monarchy which gave them an
identity, collapsed. In Babylon they were confronted with Persian religions of dualistic philosophies. Mythical and theological concepts such as heaven and hell, light and darkness, the great final battle between the forces of good and evil, etc. entered into their categories. Satan as an arch rival of Yahweh entered into Judaic religious myth during the period of exile.

The present day biblical scholarship has established beyond doubt that the creation myth of the Book of Genesis is highly influenced by the Babylonian myths of origin. The post exilic period of Israel was characterized by the Hellenistic influence. But by the time the Greek thought influenced Palestine, the Torah -- the book of Law -- was codified and canonized and was therefore not open for the intrusion of Greek philosophical motifs. We can notice the strong Greek influence in the intertestamental period and the New Testament period of the early Christian thought.

As far as the early Christian Church was concerned, the Greek influence contributed to the dichotomy between the spiritual and the material realm. It was a direct result of the form/matter controversy where form was considered sublime compared to matter.
which was considered crude and base. The Greek dichotomy between the spiritual and the material realms was easily accepted in the early Christian thought.

Another significant Greek influence was the linear conception of time, where time could progress over a linear scale proceeding to a cessation of all historical process. This enabled them to look forward to the fulfillment of their religious aspirations in a trans-historical consummation. The early Christians who lived at a time of national crisis and severe persecutions were enabled to look forward to see contemporary historical process as the intermediate stage of the final fulfillment. As opposed to this, the Jews of the intertestamental period had a calendrical and cyclical conception of time. The shape of this religion changed dramatically with Constantine’s accession to power in 313 A.D. and his embrace of Christianity. It became the state religion of the Roman Empire and shortly became a world religion. The Christian religion was an integral part of the empire's political process. The growth of this religion the world over, and the cultural impact it had in the lives of peoples are easily noticeable.
We shall move into some of the specific aspects of Christianity which contributed to the ecological bias that is reflected. The ecological critiques of Christianity point out the specific religious and psychic vigor that has contributed to the rise of materialistic values, consumeristic life style, and the spread of scientific, technological and industrial culture that damage the environment. Perhaps the key theme that has contributed to this has been the Genesis command to exercise dominion over nature. For the Israelites, nature is something that is to be subordinated to man. In the Book of Genesis we read:

Let us make man in our image and likeness; and let them have dominion over the fish of the sea, and over the birds of the air, and over the cattle, and over all the earth, and over every creeping thing that creeps upon the earth. (1/26)

Again in the following verse the oft quoted phrase 'subdue' and 'dominion' occurs. "Be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea...." (1/28)

These two quotations reveal the attitude of domination over nature. The term dominion originates from the Hebrew verb radah. This term connotes different shades of meaning but all of them point to a
hostile sense of mastery of nature. Some of the important imageries that are evoked by this word include the crushing of the grape bunches, and the exercise of power over enemies, a custodian's exercise of authority under those in custody, and a dictator's use of absolute might. The term subdue originates from the Hebrew verb kabash which connotes threshing, pressing, making someone a slave and conquering of nations. All these reflect their strong belief that the created reality is for the use of man. However, this does not mean that nature is evil or that there is no real existence for it. For everything that is created is seen as good by the creator. In the final analysis, the call to subdue the earth and to have dominion over everything demands that man should strive in such a manner that he will be able to complete the plan of God regarding human life. And he/she is called upon to create conditions for the fulfillment of this plan.

There is no doubt that these verses have inspired scientific revolution and the domination theme assumed increasing popularity. The scientists believed that divine sanction for their pursuits had been granted to them in the affirmation of man's dominant status over all creation. Francis Bacon embodied this spirit and
proclaimed that the conquest of nature was the goal of science.

There is a second account of creation that gives the impression of a very concerned attitude. The first account belongs to the priestly tradition while the second account belongs to the Yahwhistic tradition. "The Lord God took the man and put him in the garden of Eden to till it and keep it."(2/15) Some scholars read a stewardship motive in this verse as opposed to the domination theme of the previous account. However it should be noted that the context of this verse does not lend itself to such an analysis. The command to till and keep the garden of Eden imply that man has the duty to protect it. The garden of Eden belonged to Yahweh but he entrusted it to man to take care of it. By his work man exercises power over the created reality. It is important to note that what is expressed in a crude form in the first account is repeated in the second account in a mild form. Moreover, a similar perspective of domination is reflected in Genesis 2/19-20. Here God brings every beast of the field and every bird of the air before man to see what he would call them. In the Semitic tradition to name a thing is to have control over it. And so by naming the creatures, man exercises power over them.
But along with this one can also see aspects of reverence to creatures. In the *Book of Deutonomy* 20/19-20 there is a regulation that in times of war the trees of the enemies should not be destroyed. That massive destruction of property and vegetation was in vogue during war is evident from this order. Again in the same book, ch.25/4 demands that one shall not muzzle an ox when it treads out the grain. These references, though insignificant and normally unnoticed reflect an attitude of reverence and admiration for the created reality.

The ambiguity and the intolerance in Israel's view of nature is understandable in their geo-political and historical context. What has taken place is that particular historical exigencies favoured interpretations that justify domination. In fact the whole of creation account of *The Book of Genesis* is not aimed at imparting a scientific account of origin but a theological testimony of man's ultimate dependence on the Lord. The Psalmist captures this spirit well when he proclaims that "the earth is the Lord's" (Psalm no.23).

The mechanistic cosmology of the sixteenth and seventeenth centuries have also immensely contributed
to the Judeo-Christian disastrous interpretations of ecology. Under the aegis of Newton and Descartes the mechanistic view took control of all spheres of life and gradually the Christian theology subscribed to this view in the place of an organic view of life especially that of the middle ages.

The net effect of a mechanistic view was the secularization of nature. The Christian theology based on the anthropocentric motive approached nature as a self-enclosed machine, as a structure without any value of its own. It is in this context that we have to see the unholy alliance of the industrial revolution, the scientific progress and the mechanistic interpretation of the classical Christian theology.

If Christianity bears a "huge burden of guilt," does it provide enough inspiration to work for a sustainable human-world relationship? It is true that in the teachings of Francis of Assisi and the innumerable mystics, one can find enough inspiration for enhancing an ecological perspective. More than that, the Christian theology must reinterpret the significance of the mystery of incarnation of Jesus Christ. For this mystery communicates God's love manifested in Jesus Christ who embraced the earthly,
historical limitations of human life. This mystery provides ample scope for providing a spirituality of the earth, and for overcoming the unwanted emphasis on the secular and the sacred. Moreover, the ecological crisis of today must be seen as having a bearing on the present religious crisis too. And as such all the world religions, however unecological they may have been in the past, would have a perspective to offer. And the contemporary challenge is to move into an inter-religious framework where religions can learn from each other so that this crisis could adequately be addressed.

1.5.1 Eco-philosophy: Various Conceptions

Contemporary writings in eco-philosophy are vast and varied. According to Donald Worster ecology has suffered from a persistent identity problem. He draws a distinction between the Arcadian and the Imperial viewpoints. The former urges a simple quiet life in close harmony with nature while the latter urges the employment of science to extend humanity's power over the non-human world. Some others have drawn a distinction between technocratic and eco-centric approaches. The technocratic ideology is arrogant in its assumption that man is able to understand and
control events. For them science is to manage nature. Ecocentrism is larger in perspective, and emphasizes humility and responsibility.

The term 'Eco-Philosophy' itself has come to prominence with Henryk Skolimowski. The major ideas that form the backbone of his conception of eco-philosophy can be summed up in the expression ecological humanism. According to him ecological humanism is distinct from traditional humanism which emphasizes the nobility of man and appropriates nature to the ends and needs of man. Ecological humanism sees man as part of a larger scheme of nature and cosmos. According to him, ecological humanism is new set of tactics for living.

The central pillar of ecological humanism, according to him, is that the world is a sanctuary. He proposes this against the usual assumption that the world is a machine. Seeing the world as a sanctuary demands that we human beings respond to this world with reverence and responsibility, which in turn should form sufficient basis for new tactics for living. According to Skolimowski, eco-philosophy should become a way of living characterized by such eco-values as frugality, recycling and the reverence for nature. The perspective
of eco-philosophy is to initiate a philosophical reconstruction. It aims at providing a new philosophical foundation for our civilization by emphasizing the need for eco-cosmomology, a new concept of humanity as the ecological person, and ecological values.

Murray Bookchin has advocated a perspective known as social-ecology. Social-ecology refers to "an approach that rests on the non-hierarchical nature of ecological communities" and attempts to "overcome the split between society and nature, mind and body, thought and reality that makes Western images of the world." According to them the ecological crisis precipitated not because of anthropocentric perspectives but because of authoritarian social structures. It is found best expressed in capitalism and socialism. The destruction of nature reflects the distorted social relations at work in society. Social ecologists maintain that humans are nature rendered self-conscious.

They call for small-scale, egalitarian anarchistic societies, which recognize that human well-being is inextricably bound up with the well-being of the natural world on which human life depends."
The social ecologists maintain that many varieties of environmentalism view nature in mechanistic and instrumental terms. The social ecologists insist that any attempt to define humanity's relation to the rest of nature has profound implications for social political and ecological realms of life.

Joseph Grange in an essay in *Soundings* has employed a distinction between dividend ecology and foundational ecology. "Dividend ecology regards the interaction of humankind and nature solely from the perspective of investments and returns." Its motivation is to restrain our greed and diminish the aggression with which we attack nature. As the title indicates, it is interested only in the returns. It lacks the vision and resources for bringing out lasting changes. Foundational ecology, on the other hand, seeks the ground of our relation with nature as well as its corresponding depths in the human psyche.

Foundational ecology is therefore the effort to structure our modes of dwelling so that they reflect an essential and authentic way of being human.

Similarly, John Rodmann identifies four forms of ecological consciousness. The first approach is that of resource conservation in which the attempt is to
restrain reckless resource exploitation. Here the motive is enlightened self-interest. It amounts to a more prudent form of resource exploitation. The second approach is that of wilderness preservation. Some sort of religious or aesthetic value is attached to the preservation of wilderness and it tries to go beyond the mere utilitarian and economic frame of reference. In moral extensionism, the third variety, nature is seen as having a value in its own right. An intrinsic value is attributed to the members of the non-human world. In short, the existing human centered ethical thinking is extended. The fourth is named as ecological sensibility. It refers to the cultivation of a complex pattern of perceptions, attitudes, and judgments which would constitute a disposition of appropriate conduct.

The Norwegien philosopher Arne Naes has popularized the use of shallow and deep ecology perspectives. Deep ecology refers to the level of asking progressively deeper questions about the ecological relationships of which we are a part. The deep ecological views are derived from fundamentals. The central intuition of deep ecology is that:

There is no firm ontological divide in the field of existence. In other words, the world simply is not divided up into
independently existing subjects and objects, nor is there any bifurcation in reality between the human and non-human realms. Rather all entities are constituted by their relationships. To the extent that we perceive boundaries, we fall short of a deep ecological consciousness.

Deep ecology perspective, thus, calls for a profound empathy and identification with nature. However, it should be noted that their insistence on the intrinsic value and rights of nature is an erroneous projection of social categories into nature. It is important that humanity and nature are not dissociated but they must be thoughtfully differentiated.

So far we have made an inquiry into the varieties of ecological issues. Now we shall, on the background of the investigation, identify the emerging concerns of ecology.

[1] There is a dimension of interrelationship among the various realms of existence. This interrelationship flows from the fact that we are connected to the rest of nature, both materially and spiritually. It is far more intimate than the conventional world view permits us to acknowledge. This dimension of interrelationship is articulated by modern
philosophers and scientists in systemic and holistic views. They would understand various realms of existence as systems of integrated wholes and never as the mechanistic aggregate of parts. The systems-view is one of organized complexity which is beyond the Newtonian views of organized simplicity. The systems-view points to a very complex world of dynamic interrelationships. Here we do not see simple linear cause-effect relationships but a complex web of cyclical interconnections across time and geographical space. Instead of a world analyzed into parts, we see relative wholes which are greater than the sum of their parts.

This view of life is opposed to the mechanistic and objectivistic framework which is considered the legacy of Cartesian-Newtonian thinking. The chief characteristic of such a view is separation and dissociation. It differentiated mind and body, subject and object, consciousness and content, value and fact, spirit and matter. These distinctions favored a particular type of scientific inquiry, but these schisms are at the heart of the contemporary crisis. Thus, there is a bias in favor of thought over feeling, reason over emotion, fact over value, intellect over intuition, analysis over synthesis, instrumental over
intrinsic goals, and quantitative over qualitative factors.  

In 1958, Heisenberg, one of the founders of quantum mechanics wrote:

by its intervention, science alters and refashions the object of investigation, in other words, method and object can no longer be separated. The scientific world view has ceased to be a scientific world view in the true sense of the word.

It amounts to the conclusion that there is no independent observer of reality but only a participant in that reality. In such a view the classical distinctions of subject and object and fact and value are no more considered important.

How facts are investigated, selected, and interpreted depends on one's values, which are colored by how one sees the world. This does not leave us in a frightening morass of subjectivity but instead is an essential awakening to the interactive character of our relationship with the world.

2. Another level of concern that is reflected in various ecological discussions is that an anthropocentric perspective is disastrous to the environment in the long run. Anthropocentrism or in other words homocentrism means human chauvinism.
conveys the idea that humans are the 'crown of creation' and that they are the source of all values. In short, this perspective emphasizes that 'man is the measure of all things,' and magnify our sense of self-importance in the larger scheme of things.

What is wrong with being anthropocentric? Can we as human beings in any way escape from an anthropocentric perspective? These are questions of central importance. However, we must affirm that anthropocentrism in its true sense should not forget our sense of responsibility.

Anthropocentrism doesn't imply that we magnify our self-importance to the detriment of our environment. In many cases we have insisted on the difference of man from non-humans to such an extent that we view ourselves as unrelated to other creatures. The fact that one is critical of anthropocentrism does not imply that one is a misanthropist. Misanthropy, as the term itself suggests, means opposed to being human or nurturing hatred or distrust of mankind.

These two perspectives are interrelated, or in other words one implies the other. A genuine emphasis on interrelationship presupposes that we go beyond a human-centered world view.
It allows us to understand that man is one species of system in a complex and embracing hierarchy of nature, and at the same time it tells us that all systems have value and intrinsic worth.  

1.6.1 Heidegger and Ecology

We have identified two important aspects of ecology, namely, a search for viewing life in its totality from the perspective of interrelationship and a concerted effort to move away from a human-centered world view. Now the guiding question is this: Can we approach the philosophy of Martin Heidegger from these perspectives which are significant for ecology as a whole.

Ecological awareness is a contemporary phenomenon and therefore, one will not find in Heidegger's published works anything directly related to ecology. Here one could raise a question regarding the very relevance of the question. Although this is apparently true, from a hermeneutic point of view, the ecological concerns are not alien to the 'Being-question.' There is ample scope to interpret the implications of the 'Being-question' from this perspective. This could be established in the following manner.
It is a very old claim that any great thinker has essentially one fundamental idea. The truth of this claim may be debatable, but the claim remains very much true in the case of Heidegger. As a great thinker of this century, he has continuously sought after the meaning of one single question -- the question of Being (Seinsfrage), or in other words, the meaning of Being. This does not mean that till the end of his life, he was looking for an answer to the same question. The meaning of the question changed as his thinking evolved. But till the end of his life he was convinced that the very questionability of Seinsfrage was his main thrust. If Heidegger was a man of single thought -- the question of Being -- how could this single thought lend itself to be interpreted from the perspective of ecology? In other words, what is ecological about Seinsfrage? Will it not be going beyond the purview of the single-mindedness of Heidegger? These are genuine questions that stir us today.

This problematic could be presented in a provisional manner as follows. What does Heidegger understand by Being? "Being, indeed -- What is Being?" - writes Heidegger in his "Letter on Humanism":

43
[It] is not God, nor [some] ground of the world. Being is broader than all beings — and yet is nearer to man than all beings. Whether they be rocks, animals, works of art, machines, angels, or God. Being is what is nearest [to man]. Yet [this] nearness remains farthest removed from him....

This characterization implies that from the perspective of Sein (Being), Being is not a being or an entity at all but that which enables entities to be present to man and men to each other. From the perspective of entities (Seindes), Being encompasses them all, just as a domain of openness encompasses what is found within it. "Being is the domain of openness, because it is the lighting-process by which beings are lighted up."

Heidegger's fundamental insight is that there is a difference between Being and entities. We are very familiar with entities of all types. But we have great difficulty in specifying the meaning of Being. Being cannot be conceived as a type of entity but "it refers to the self-manifesting, presencing, or revealing of entities." This self-manifesting, presencing is the domain of openness which takes place within a clearing and it is called human existence. One of the paradoxes of human existence is that we are an entity and at the same time a clearing in which entities can be or be manifest. In other words, we
human beings are not entities in so far as we are the clearing. We are no-things at all but the clearing in which things can reveal themselves. This is where Heidegger's insightful use of the term Dasein becomes significant. He uses this term to describe this human existence which is the there in which things or entities can be. Heidegger always emphasized that this clearing is no human possession. He further characterized this basic openness as time. Time is the three dimensional realm in which entities can show themselves in various ways. The time itself is not a thing but is the realm in which things can appear. It enables him to avoid the mistake of seeing time as independent of human existence. If time is seen from the perspective of human existence then the human temporality is essentially historical. It implies that entities manifests themselves in different ways in different times. If this is the case, we err in accepting one interpretation of reality as universally valid and in the framework of which we understand the relation between Being and entities.

The Cartesian framework has been of such type. In that framework human beings became the self-conscious subject for whom all other entities are objects to be known and to be utilized for personal ends. In such a
frame of reference the material world is reduced to an object to be dominated. In fact Heidegger's critique of modern technology is developed from this perspective. Thus the question of Being, which searches for the meaning of Being, begins with the existential analytic of Dasein, prepares a ground for critiquing 'substance ontology,' and proceeds through the winding paths of the thinking of Being as such. In the Being-process, man becomes a receptive listener to the beckoning of Being. This Denkweg manifests basically an ecological orientation, though much of it remains unsaid. It goes well with Heidegger who always maintained that what is the most important in any thinker is what remains "unsaid."

In a certain sense, the philosophical works of Martin Heidegger belongs to history. But as Gadamer remarked, "each age has to determine anew its position in relation to, or its attitude towards, his work." Taking clue from the observation of Gadamer, we can point out that the effort of reading Heidegger from an ecological perspective is a way of continuing the movement of thought initiated by Heidegger's questions. Consequently, we would focus on three areas of Heidegger's thought. The first area will deal with the fundamental ontology where we shall focus on
Heidegger's philosophy of the world. The second area will deal with his critique of technology. The implications of these analyses for man as a dweller will form the third area of the study.

Reading Heidegger from the perspective of ecology is relatively a new phenomenon. Although some scholars have made attempts in this line, a full-length study is not yet available. The very first attempt in this line is that of George J. Seidel\(^3\) who in 1971 published an article entitled "Heidegger: Philosopher for Ecologists?" In the article he discussed at length Heidegger's examination of technology. Towards the end of the article, he maintained that Heidegger's views of the true nature of human knowing point to Heidegger as a possible philosopher for the ecologists.\(^4\) True knowing is far from the forceful and aggressive thinking. On the other hand true knowing "lets Being be." This reflects a basic attitude which man should exhibit towards nature. And man is called upon to watch over nature rather than to dominate it thoughtlessly. Another attempt is found in Joseph Grange,\(^5\) who distinguished between dividend (anthropocentric) ecology and foundational (respectful) ecology. He quoted Heidegger to elaborate his concept of foundational ecology. He understood ecology as, "the effort to

47
structure our modes of dwelling so that they reflect an essential and authentic way of being human."

A seminal contribution in this field is made by Michael Zimmerman, an acknowledged Heidegger scholar. In 1983, he published an article in *Environmental Ethics* entitled "Toward a Heideggerian Ethos for Radical Environmentalism." Again, in 1986, he explored the implications of Heidegger's thought for deep ecology. In these studies, he has provided a thoughtful account of the themes and the development of Heidegger's thought on nature, nature's fate and on the place of animals and humans in nature. He has seen all these in the context of Heidegger's critique of technology, in the new ethos that He wanted to propagate, namely, "a new paradigm for understanding what we and other beings are." But in 1993, Michael Zimmerman published another article again in *Environmental Ethics* which was an attempt to rethink the Heidegger-Deep Ecology relationship. The recent revelations concerning Heidegger's thought and his own version of National Socialism which led the author to rethink his earlier efforts to portray Heidegger as a forerunner of deep ecology. Though Zimmerman was critical of the fascist tendencies both in Heidegger as
well as in Deep ecology, he was in agreement with the main line of the arguments.

We can find another source of thinking in A.T. Nuyen who tried to think the relevance of the Heideggerian existential ethic for the human environment. He maintained that in the context of environmental degradation some thinkers propagate "ecological ethics" and the main claim of this movement is that nature has an "intrinsic value." This is to counteract the domination attitude. He suggested the Heideggerian existential ethics which condemns the purely instrumental view of nature which treats natural objects merely as objects fit for commercial exploitation. According to him, the "Heideggerian existential ethics provides an ontological grounding for our protective dealings with nature." According to Bill Devall and George Sessions, Heidegger made three contributions to Deep, long-range ecology literature. First, he provided a solid critique of the development of Western philosophy. The anthropocentric development of Western philosophy paved the way for a technocratic mentality which encourages the domination of nature. Second, Heidegger initiated his readers to a dangerous path of thinking. This thinking is closer to the Taoist process of contemplation rather than the
analytical thinking of the West. Third, Heidegger called us to dwell authentically on this earth.

A recent contribution to the field of Heidegger and Ecology is edited by Ladelle McWhoter. The book, which is the result of a conference on "Heidegger and the Earth," is a collection of articles by a few Heidegger scholars. In the papers, the authors make an attempt to reflect on ecology along with the thinking that arises out of the texts of Martin Heidegger. It is presented as a response to a call and an attempt to think as Heidegger did. Though the claim is a lofty one, the final outcome does not match the claim.

The first essay, "Guilt as Management Technology: A Call to Heideggerian Reflection," presents an overview of Heidegger's thinking on technology. It discusses the Heideggarian distinction of calculative and meditative thinking. As the title indicates, the essay is more of an invitation to be aware of the calculative moral consciousness. There is another essay in the volume which has "Heidegger and Ecology" as the title. Here the author makes an attempt to see the connection between Heidegger's thought and ecological thinking. He examines some of Heidegger's fundamental notions in their relation to ecology. But it should be
noted that the author concentrates on the later Heidegger with concepts such as "dwelling" which are ecologically very significant. The rest of the essays have a focus on the earth. They attempt to think beyond the traditional modes of thought. One author tries to do so by "Singing the Earth" which itself is a title of one presentation. The orientation of the book and its contribution to the field of Heidegger and ecology could be judged from the acknowledgment of the editor, "This book is a beginning, an opening, an attempt, and, we hope, in the best Nietzschean sense of the word a temptation for further thought."  

It is this "temptation for further thought" that beckons us to reflect further. Many of the studies referred to have been beginnings in the field of Heidegger and ecology. Heidegger scholars often point out the significance of notions such as "care" or "dwelling" in relation to ecology. As we have mentioned earlier, a comprehensive study is yet to be found. It is true that the later Heidegger can be used very easily for ecological thinking. But then how do we account for the ecological dimension of the 'Being question' itself? What is the ecological significance of fundamental ontology and specially that of Being-in-the-World? We propose to make an inquiry along these
lines with the guiding perspectives on ecology that we have identified.