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Concerning Husserl's Concept of Nature

Oisin McMahon

A Thesis

in

The Department

of

Philosophy

**Presented in Partial Fulfilment of the Requirements
for the Degree of Masters of Arts**

at

**Concordia University
Montreal, Quebec, Canada**

June 1993

c Oisin McMahon, 1993



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Abstract

Concerning Husserl's Concept of Nature

Oisín McMahon

One of the dominant ideas shaping the landscape of our existence is the discussion of the ecological situation of nature. The debate over whether or not the being of the world is being modified in an unalterable direction is discussed in all circles. Ecology stands at the forefront of this debate.

Edmund Husserl's phenomenological texts are concerned with crucial issues that are of relevance to ecology. Husserl, on the basis of his phenomenology, investigates such topics as the meaning of, and scientific construction of "nature". Husserl also focuses on the crisis of humanity that comes about from the universal mathematization of nature. Historical reflections, of a phenomenological type, are devoted to the concept of nature and its relation to the world we inhabit. Phenomenology, methodologically, is a advantageous in comparison to ecology.

This thesis is devoted to the explication of Husserl's concept of nature found in certain texts of his. A partial reason for this undertaking is the examination of the assumption that ecology may benefit from a merger with Husserlian phenomenology. By outlining Husserl's philosophical method and concerns I argue that there are key aspects of Husserl's work that could be of benefit to ecology. It is concluded, on the basis of Husserl's phenomenology, that ecology can have a secure and advantageous ground in phenomenology.

Acknowledgements

My gratitude is extended to Dr. Dallas Laskey who, as my thesis supervisor, directed my wanderings through this rich phenomenological world. Mastering a phenomenological attitude is most difficult, and would be a much more arduous task without an able teacher and guide.

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For Maureen Chafe

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We cannot seriously continue our previous philosophizing; it lets us hope only for philosophies, never for philosophy.

Introduction

Much thought and intellectual effort has been given to the expression of humanity's ecological crisis and its place in the historical becoming of the world. Various interpretations of this situation have been put forward as well as solutions offered. Public awareness is increasingly being focused on growing problems such as the greenhouse effect, acid rain, holes in the ozone layer, and the destruction of rainforests. Awareness is also increasing on the relation of the West to the Third World, the plight of nonhuman species, pollution, deforestation, overfishing, renewable resources, and the growth of deserts. Recently there is a realization that the former political entity of Eastern Europe is also afflicted with ecological disaster areas. One science that deals with the relationship of humanity to nonhuman reality is ecology. Ecology is a descriptive science that has as its subject matter the complex interrelations of natural organisms and the forces which support such life. Ecology, in its descriptive practices, brings to light some of the consequences of such long term dealings. These dealings are usually described as ecological problems such as those already mentioned.¹

Such ecological problems, and others not mentioned, can be defined as problems

¹ For instance, see: Teresa deGroh, *Deep Ecology and Environmental Ethics: A Selected Bibliography* (Chicago: University of Illinois Press, 1987).

arising as a practical consequence of humankind's dealings with nature; nature understood as the nonhuman environment of humanity. Similarly this crisis can be understood as a separation, a cutting, or a dividing of humankind's practical and cultural activities from the earth which in a mysterious way is self-supporting or regulating. With regards to nature the ecological crisis is one of proceeding with one course of actions, in activities dealing with the nonhuman world, and excluding other paths of interaction. In other forms, crisis can mean a dispute, a dividing of an original unity. To speak of different groups of sciences, each dealing with separate realms of reality while engaging in a dispute over methods and approaches to the world counters the original task that some philosophers see for science: to provide a universal unified knowledge of the world. There are grounds for the division of the sciences. This is made evident by their regional ontologies, but this division cannot be absolute. The sciences, to be truly scientific, must maintain some sort of unity.

Philosophical attempts to explicate and understand our rootedness in such an ecological crisis are not plentiful. Within the grand tradition of Western Reason professors of philosophy have tended to overlook this problem in favour of more concrete philosophical issues. Charles Hartshorne writes that in historical religions and philosophies he can find no clear ideas on how humanity must relate to its nonhuman world if it is not to place itself in peril. What is given expression, Hartshorne notes, is the "enjoyment of life while it is living in a reasonably normal way".² In a recent text: *The Ethics of*

² Charles Hartshorne, "The Environmental Results of Technology" in *Philosophy and Environmental Crisis* ed. W. Blackstone (Athens: University of Georgia Press, 1974), p. 72.

*Environmental Concern*³, Robin Attfield notes that the only philosophical treatment of specific ecological problems is John Passmore's *Man's Responsibility of Nature*.⁴ This new and underdeveloped field of philosophical investigation takes its approach from the science of ethics and morality. There appears to be very few works devoted to a critique of the foundations of the sciences which have participated and in the formation of the ecological problem.

What gets overlooked, for the most part, is the centrality of many of Edmund Husserl's thematic investigations to the concerns of those who write under the ecology banner.⁵ Concerns such as the denial of ethical questions from within the sphere of science and the objectification of the natural world by the rise of positivism are as central to Husserl as they are to ecology. Though we must admit that the formulation of questions and grounds for beginning are radically different.

The difference between the two lies in ecology being a descriptive science of the empirical type while Husserlian phenomenology stands as a transcendental science of the *a priori* of consciousness and serves as a foundation for empirical sciences. Broadly speaking, any science such as ecology, for instance, must take its clues from phenomenology. This claim is not my own, rather it is an assertion that Husserl frequently

³ Robin Attfield, *The Ethics of Environmental Concern* (Athens: University of Georgia Press, 1991), p. 4.

⁴ See: John Passmore, *Man's Responsibility for Nature* (London: Duckworth, 1980).

⁵ See, for instance, the following texts which strive toward giving clarity to ecological themes in Husserl: Erazim Kohak, *The Embers and the Stars* (Chicago: The University of Chicago Press, 1984), & Don Ihde, *Technology and the Life-World: From Garden to Earth* (Bloomington: Indiana University Press, 1990).

makes throughout his works, since he believed an elaboration of phenomenology would provide foundations for sciences of a genuine sort. Central topics for ecology such as nature, existence, nonhuman reality, perception and interpretation can benefit from phenomenological clarification since phenomenology, according to Husserl, strives to elucidate the sense of the concepts we employ. Also, the correct phenomenological explication of the relationship of the natural sciences to their objects of investigation and the direct experience of the intuitively given surrounding world must be clarified. In what may seem a strange turn of investigative direction we shall focus our attention on Husserl's phenomenological reflections and show that Husserl moves in a sphere that is of permanent interest to sciences such as ecology. And we must clearly recognize the restrictions that exist when one tries to construct a dialogue between transcendental and empirical science since Husserl's phenomenological reduction prohibits the consideration of the world by the empirical sciences.

The aim of this thesis is a defense of the claim that there lies in certain of Husserl's texts valuable insights into problems that are central to what is commonly signified as the ecology movement. While such ideas as nature, our relation to the material world, the status of modern natural science, the historical destiny of humanity, and our unity together as a global community take on a special significance under the rigours of Husserlian phenomenology, they are essential to a proper understanding of the meaning of our ecological crisis. The conceptual clarification of many environmental themes and Husserl's account of the type of environmental crisis that he characterizes have an untimely significance in light of the reports made public by ecology. Prior to the

beginnings of a type of eco-philosophy there must be the quest for philosophical foundations upon which these schemes can be articulated.

Primarily, this thesis gets its impetus from findings given over by ecology. But it is precisely here that my thesis, or intellectual project, dissolves its relationship with ecology. My aim here is not a description or critique of ecology nor is it a phenomenological prolegomena to ecology, though ecology does serve as a guide in the consideration of certain themes of Husserl. My intention in this thesis is to focus, for the most part, on a theme central to an understanding of our ecological crisis: nature. By way of unravelling Husserl's idea of nature I hope to convince the reader of the importance of Husserl's characterization of the crisis which he understood as affecting his "present sorrowful age" and "the entire domain of European culture".⁶ In advance, it should be noted that many, if not all, of the problematics set up by the descriptive science of ecology are subsumed under more comprehensive problems that Husserlian phenomenology reveals. Therefore, it is my contention that the present times do warrant a return to, and consideration of, insights revealed by Husserl's phenomenology.

In the first chapter of my thesis I shall evoke a sense of phenomenology by way of an exposition of Husserl's development of phenomenology as a pure science of the *a priori* of consciousness. By focusing on Husserl's demarcation of the natural attitude - as distinct from the truly phenomenological attitude - I try to give clarity to our first formulation of an idea of nature.

The second chapter is devoted to the clarification of the problem that nature plays

⁶ Edmund Husserl, "Renewal: Its Problem and Method" in Peter McCormick & Frederick A. Elliston eds., *Husserl: Shorter Works* (Notre Dame: University of Notre Dame Press, 1981), p. 326.

for the physicalistic sciences of material reality. The aim of this chapter is to map out the transformation of the earlier concept of nature from the *Ideas* period to the comprehensive study of nature in the *Crisis*. The theme of the *Ideas* is, in part, the exploration of the manner in which humanity exists immediately in its life-world and absolutizes its world, nature.⁷ It is a move beyond nature understood as spatio-temporal reality.⁸ In the *Crisis* this theme is reconsidered and Husserl's task is to gain a concept of nature that is not "naturalistic"⁹, but one which rests on the governing of the concept of nature by its historically changing status. What I wish to explore here is how Husserl moves from an idea of nature as objectively determined to the idea of nature that is historically changing.

Chapter three is concerned with how the advanced idea of nature becomes the focus of a problem in its own right. Namely, the crisis of the life-world and its relation to history that Husserl discusses in his last work *The Crisis of European Sciences*.

The final chapter is a consideration of directions laid open by the phenomenological insights of Husserl. What I explore is the unique way in which Husserlian phenomenology makes the transition from a philosophy of reflection to a philosophy which centres its focus on the destiny of humanity. If Husserl's reflections are correct then we must consider what paths lay open for the future direction of humanity.

⁷ Edmund Husserl, *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*. Second Book: *Studies in the Phenomenology of Constitution*, trans. Richard Rojcewicz & Andre Schuwer (Boston: Kluwer Academic Publishers, 1989), p. 208. Hereafter cited as *Ideas II*.

⁸ *Ideas II*, p. 2.

⁹ Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy* trans. David Carr (Evanston: Northwestern University Press, 1970), p. 327. Hereafter cited as *Crisis*.

Chapter I

Phenomenology and Nature

To persist in our understanding of nature by way of an exposition of the theme of nature in selected works of Edmund Husserl presents a task which is twofold. First and foremost, after admitting that we take our clue for this investigation from the descriptive science of ecology, is the task of satisfying ourselves with a knowledge of Husserl's phenomenology. The justification for this is that we must fix, with sufficient rigor, the relevant aspects of phenomenology from which we may draw our knowledge of nature. Prior to the undertaking of our investigations we must fix the terrain in which this investigation occurs.

Second, we must find a path into our understanding of Husserl's philosophical work. This is an answer to ever-present questions of where shall we begin. One path that Husserl chose is founded upon rigorous reflections on the significance of Descartes' *cogito* - the I think.¹⁰ Husserl subjects the concept of the *cogito* to radical modifications as he reveals what is implicit in adhering to such a perspective. Husserl's reformulation of the Cartesian *cogito* is an attempt to reveal the intentional acts present in the lived

¹⁰ Iso Kern identifies three ways of access into Husserl's phenomenological reduction. They are i) the way in through Cartesianism, ii) investigations in transcendental psychology, and iii) the critique of ontology. See: Iso Kern, "The Three Ways to the Transcendental Phenomenological Reduction in the Philosophy of Edmund Husserl" in Frederick Elliston & Peter McCormick eds., *Husserl: Expositions and Appraisals* (Notre Dame: University of Notre Dame Press, 1977), pp. 126 - 149.

experiences of the transcendental Ego.¹¹ It is an attempt to lay bare the features of a consciousness which goes beyond itself, as a consciousness which is conscious of something (intentionality) and grasps the objects of perception in a particular manner. Therefore we will follow Husserl's path since what we want to first consider is an idea of nature that is constituted in an intentional act of the Ego.¹² Specifically, I want to begin an elaboration of what Husserl describes as material nature. The question of the possibility of cognition is posed and answered by Husserl in a critique of thinking under the guiding theme of the phenomenological reduction which reveals the intentional structures of consciousness as being prior to the constitution of nature.

Thus, we must begin with an exposition of the themes and tasks of phenomenology as Husserl himself presents them in his work. In doing this we must keep present our question of what is nature.

Phenomenology

The first elaborate attempt by Edmund Husserl to arrive at a pure phenomenon and so at a radical philosophical elaboration of the material world or the world of nature in the reflective attitude; the elaboration of the possibility of the cognition of the world, is

¹¹ See: Edmund Husserl, *Cartesian Meditations*, trans. Dorion Cairns (London: Kluwer Academic Publishers, 1991), Fourth Meditation. Cairns has rendered the translation of the German Ich (I) as Ego. This term has no psychoanalytic connotations. See: Dorion Cairns, *Guide for Translating Husserl* (The Hague: Martinus Nijhoff, 1973), p. 71.

¹² Paul Ricoeur, *Husserl: An Analysis of His Phenomenology* (Evanston: Northwestern University Press, 1967), p. 17.

contained, after earlier starts, in the 1907 lecture, *The Idea of Phenomenology*.¹¹ This text is valuable for our understanding of Husserl's phenomenology since it provides concrete examples of the motives and goals of phenomenology. Moreover this text is important since it presents the reader with a lucid demonstration of Husserl's procedure of the phenomenological reduction. Though this text may appear to be one-sided in its reliance on the *a priori* features of consciousness, *The Idea of Phenomenology* does give a precise account of the motifs of phenomenology and hints at the direction for a phenomenology of nature.

In *The Idea of Phenomenology*, Edmund Husserl attempts to come to terms with the philosophical problem that pertains to the possibility of cognition. The problem which Husserl confronts is the development of a theory of knowledge, as a science, which provides clear insights into the essential features of cognition and the possibility of its achievements. Phenomenology, in *The Idea of Phenomenology* is the method of the critique of cognition. The question for Husserl is, if cognition stands before the tribunal of reason then how is it possible for a critique of cognition in the act of cognition. The question can also be so framed: how can cognition discover something that is not lived experience. That is, how can consciousness within me (the immanent) discover and take into itself its object of consciousness (the transcendent that is outside me). An example of the transcendent can be the idea of empirical scientific nature. This genuinely philosophical question is answered by Husserl with the three stages of phenomenological

¹¹ Edmund Husserl, *The Idea of Phenomenology*, trans. William p. Alston & George Nakhikian (The Hague: Martinus Nijhoff, 1964).

reduction¹⁴: the move to Cartesian methodic doubt, the exclusion of all transcendence, and the discovery of transcendence in immanence.

The first stage presents the idea of a critique of cognition and of phenomenology as this critique. Thus phenomenology lies on a different level than the objective cognition which goes to things in an objective, direct way.¹⁵ This includes all special scientific disciplines. Husserl builds up the distinction between phenomenology as a science and the positivistic sciences on the Cartesian methodic doubt which suspends those judgements which can exhibit an imperfect certainty. Husserl notes:

At the outset, we must not take anything as a cognition just because it seems to be one; otherwise we would have no possible, or what comes to be the same thing, no sensible object.¹⁶

The Cartesian doubt is replaced by Husserl with a mere critical suspension or abstaining of judgement (*epoche*); a suspension of the validity of such judgements for the critique of cognition. Thus, we may not derive any knowledge from any pre-established scientific disciplines.¹⁷ Rather we must stick to what is indubitable; the perception of lived experience in its course of simple reflection. Perception is thus to become absolute, drawing on nothing else. It is a self-certifying source of cognition which draws only on itself in genuine immanence. The purely immanent is indubitable since it presents nothing

¹⁴ For a comprehensive treatment of Husserl's phenomenological reduction, see: Maurice Natanson, *Edmund Husserl: Philosopher of Infinite Tasks* (Evanston: Northwestern University Press, 1973), Chs. 3 - 4.

¹⁵ Joseph J. Kockelmans, "World Constitution," *Analecta Husserliana* Vol. I (Boston: D. Reidel Publishing Company), p. 11.

¹⁶ *The Idea of Phenomenology*, p.4.

¹⁷ Quintin Lauer, "The Subjectivity of Objectivity" in *Edmund Husserl 1859-1959* (The Hague: Martinus Nijhoff, 1959), p. 167.

else and is adequately given in consciousness.¹⁸ Husserl takes the world of nature as being in flux, but maintains that the features of consciousness cannot be in flux. This is a justification for the primacy of consciousness which constitutes the world.

Husserl's sole focus on pure immanence leads to the comprehensive exclusion of that which is transcendent. Here we must realize that, for the present, the idea of material nature is suspended by the enactment of the reduction since the precise task of the phenomenological reduction is the exclusion of "all that is transcendently posited".¹⁹ For Husserl, all that is not immanent is set aside from all judgements about its validity and its existence is not predicated upon. He remarks that: "I am to treat all sciences as phenomenona, hence not as systems of valid truths, not as premises, not even as hypotheses for me to reach the truth with".²⁰ Phenomenology excludes any dependence on the researches and methods of the natural sciences or psychology, rather it must build its method on its self-evident findings.

Even though Husserl abstains from predicating judgements of that which is transcendent, we can formulate two central questions that pertain to immanence and transcendence. (1) How can cognition go beyond, grasp, what is really beyond it? (2) How can cognition posit as existing something that is not directly given to it? These two questions characterize the problem of the phenomenological reduction. It is, on the one

¹⁸ Jan Patočka, "Husserl's Transcendental Turn: The Phenomenological Reduction in *The Idea of Phenomenology* and *Ideas I*, in *Jan Patočka: Philosophy and Selected Writings* ed. Erazim Kohák. (Chicago: The University of Chicago Press, 1989), p. 221.

¹⁹ *The Idea of Phenomenology*, p. 5.

²⁰ *The Idea of Phenomenology*, p. 6.

hand, a reduction of transcendence to immanence, but, seen from the other side, it is the discovery of the birth of transcendence in immanence. And here we must bear in mind that the birth of transcendence in immanence will become central when we later examine Husserl's concept of nature.

The second stage of Husserl's exposition of the concept of phenomenological reduction can be described as a progression from the exclusion of natural thinking and transcendence to the exclusion of transcendence altogether. Here Husserl carries out a modification of the Cartesian *cogitatio*; the object of consciousness. Husserl distinguishes psychological reflection from phenomenological reflection; reflection on pure phenomenon. The standpoint of psychology is abandoned by Husserl and he takes up pure reflection about *cogitatio* as such.²¹ By way of phenomenological reduction immanence in something real is abandoned in favour of reflection on the lived experiences of the *cogitatio*.

The task that Husserl sets for phenomenology is not to eliminate all objectivity nor the sphere of nature, rather it is the task of grounding the transcendental world in immanence. What must be grasped is cognition aware of itself. Husserl remarks that the idea of phenomenological reduction

(M)eaning not the exclusion of the genuine transcendent (perhaps even in some psychologico-empirical sense), but the exclusion of the transcendent as something to be accepted as existent, i.e. everything that is not evident givenness in the true sense, that is not given to pure "seeing".²²

²¹ Jan Patočka, "Cartesianism and Phenomenology" in *Jan Patočka: Philosophy and Selected Writings* ed. Erazim Kohák (Chicago: The University of Chicago Press, 1989), p. 301.

²² *The Idea of Phenomenology*, p. 9.

Husserl maintains that one must grasp the meaning of that which is given over in the seeing of the essence of cognition.

Thus, if I observe an intuitive judgement reflexively, then I note that it is based on intuition and imagination. Phenomenological intuition, as contrasted with intuition empirically understood - intuition which takes the world in its hypothetical being - is seeing unencumbered by knowing. Phenomenological intuition is, according to Husserl, is the perception of states of affairs themselves. In a sense, Husserl is returning to the mundane world which became estranged by the ravages of empirical skepticism.²³ It is an absolute recognition in immanence.²⁴ It is an attempt to drop the distinction between world and mind and understand the world, mind, as a feature of thought. There belongs to this seeing, the seeing of the difference between perception and cognition, of judgement and its moments, of intention, of the real and fantasy, and so forth. The intentionality of consciousness, with the perceiving of the essential leads on beyond the givenness of the transcendent in immanence. The world in its totality remains unconsidered and Husserl is searching for the indubitable features of consciousness which allow this world to be present for consciousness as the very world which belongs to intentionality. These irreducible features of transcendental consciousness are made present through the phenomenological reduction and the world is thus understood as a constituted product of consciousness, as a world which stands ready in lived experience.

The third stage begins here. It is the move from absolute immanence to the

²³ *Edmund Husserl: Philosopher of Infinite Tasks*, pp. 93 - 95.

²⁴ Jonathan K. Cooper-Weile, *The Totalizing Act: Key to Husserl's Early Philosophy* (Boston: Kluwer Academic Publishers, 1989), pp. 72 - 89.

discovery of transcendence in immanence. The third stage is the attempt to answer whether or not the object of cognition transcends the temporal stream of cognition.

Husserl maintains that in perceiving the universal, we seize everything that we can have as present before us in perception; no further cognition about it is possible. Consequently, we have again, a certain immanence, the immanence of self-giveness. Thus transcendence can also be an immanence of self-giveness. All relations, all mutual references, all junctures and all purposiveness of cognitive processes in their mutuality do not lie beyond the reach of phenomenological reflection but are accessible to it. Husserl states:

And the task is just this: within the framework of pure evidence (*Evidenz*) or self-giveness *to trace out all forms of givenness and all correlations* and to conduct an elucidatory analysis. Of course, to do this we need to take account not only of single acts but also of their complexities, of the consistency or the inconsistency of their connections and of the intentions (*Teleologien*) apparent in them.²⁵

The meaning of the experiential processes tracing the possibilities of their being any object of cognition and presenting this object of cognition for viewing can be immanently grasped. What is immanently grasped functions as evidence for Husserl. Its status comes from its originary presentation in consciousness. The perceived thing is grasped in a series of adumbrations. But as an object for consciousness it is apprehended as a unity. The claims to evidence are presented to give intentionality some sort of contact with being.²⁶ Being remains there as something that can be returned to. In Husserl's words: "The in-itself is the correspondent of an infinity of intendings and an infinity of verifyings...it

²⁵ *The Idea of Phenomenology*, p. 13.

²⁶ *Cartesian Meditations*, Third Meditation.

refers to potential evidences which, like the facts lived through, are repeatable to infinity."²⁷ This will solve the problem posed: that of presenting a critical foundation of science and of cognition generally, and of clarifying the nature of transcendence and the sense of its objectivity. Phenomenology tries to account for the originary style of perception while accounting for the inadequacy of perception.

On the basis of the proceeding Husserl goes through various types of objectivities from individual real objects to universals, to conceptual formations, facts and meanings, values, ect., in order to note that everywhere the meaning of objectivity opens up in a correlative study of lived experiences and its transcendental objectivity which is only accessible in it, and through it and concludes:

It is only in cognition that the essence of objectivity can be studied at all, with respect to its basic forms; only in cognition is it truly given, is it evidently "seen". This evident *seeing* itself is truly *cognition in the fullest sense*. And the object is not a thing which is put into cognition as into a sack, as if cognition were an empty form... But in givenness we see that *the object is constituted in cognition*... and cognitive acts... are not isolated particulars... As they are essentially related to one another they display a teleological coherence and corresponding connections of... verification and their opposites...²⁸

Phenomenological reduction thus does not lead to a lessening, a narrowing, of the content of cognition but rather to its deepening to the very essence of cognition and reason as such.

Such is the first description of the phenomenological reduction and of its philosophical meaning, particularly significant in its conciseness; the discovery of reason

²⁷ *Cartesian Meditations*, p. 96.

²⁸ *The Idea of Phenomenology*, p. 75.

as the foundation of human reflective cognition and the discovery of consciousness as the foundation of our empirical cognitive acts.

In the expositions of *The Idea of Phenomenology* it is clearly evident that an object of consciousness is constituted in cognition and that it is thus relative to the lived experience which is given absolutely. This double mode of givenness (*cogito, cogitatio*) does not lead to the conclusion of a dual, fundamentally different mode of givenness. In this sense we can say that the exposition of *The Idea of Phenomenology* does not wholly fulfil Husserl's speculative intention of justifying a philosophical approach which displays the meaning of the being of the world as the intentional formation of transcendental subjectivity. The omission in *The Idea of Phenomenology* is that it does not show that immanence is more original, more basic. Even though objectivity is a correlate of the intentional process it remains as a presupposition. The correlation of object and the structure of lived experience would entail a derivative nature of the object only if the structure of lived experience were understood as a productive activity and not as a static structure.

Thus, if it is to be shown that the absolute givenness of reflective consciousness really entails the primacy of subjective being to the objective, then this primacy must be justified more closely. The description of the reduction presented in *Ideas I* is devoted to this justification. Only from this standpoint does it become intelligible why Husserl devotes so much attention to describing the idea of the world and the dependence of this idea on the regional *eidōs* of material nature.

Consistent with the foregoing, the conceptual pair of immanence and

transcendence, which stand at the forefront of *The Idea of Phenomenology* and overtly point to the Cartesian motif of indubitability in subjectivity, are now pushed into the conceptual pair which covers the same opposition but in a new cloak; the being of transcendental consciousness and the being of the world - the worldly transcendental.²⁹

How does Husserl explain the concept of the material world of nature in *Ideas I*?

The world is presented as the context of material nature, extending endlessly in space and time, given previously as the anticipated correlate of consciousness. That is, given as in originary presenting consciousness which serves as the legitimizing source of all cognitions made about the world.³⁰ It is the world that is given in immediate experience. The givenness of the world has its centre in what is perceptually present but it is not restricted to it. A sphere of the more or less certain is essentially co-present with the givenness of the world and this sphere is surrounded by a dimly conscious horizon of indeterminate reality whose givenness is a necessity which grounds the endlessness of the givenness of the world.³¹ Temporal extension is in contrast with the spatial givenness which is stressed secondarily. Practical aspects of lived experience are treated from the viewpoint of the polarity of the objective world as against the world of values, possessions, and practice.³² The ideal content of the world, that is ideal theoretical and

²⁹ Edmund Husserl, *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy. First Book: General Introduction to a Pure Phenomenology*, trans. F. Kersten (The Hague: Martinus Nijhoff Publishers, 1982), sect. 28. Hereafter cited as *Ideas I*

³⁰ *Ideas I*, p. 44. (original pagination)

³¹ *Ideas I*, sect 44.

³² Erazim Kohak, *Idea & Experience* (Chicago: University of Chicago Press, 1978), p. 71.

mathematical objects, etc., are treated as a correlation of the activities of consciousness such that they are not given prevently as a constant horizon for subjectivity, but are presented rather as the theoretical constructs of the experiential sciences of the world. All this can be summed up in the general thesis of the natural standpoint; that the world as reality and containing the ideal laws of nature is always already present.³³ It is present as such, but so that it can be different than I thought, such that I have to modify such appearances and replace them with a different reality which is, in some sense, hypothetical and in need of constant revision and verification.

This general thesis is not a special, particular act, say a judgement concerning the existence of the world, rather it belongs to the natural standpoint as its constant correlate.³⁴ Every perceptual particular places itself already within the modifiers of given, present, and already here. Thereby we grasp, predicatively, a region which is non-predictively present in original experience.

Now Husserl insists that whether it is explicit or not, this general thesis can be set aside just like an explicit thesis of judgement. We can treat it as we treat particular cognitions which can be suspended, as Descartes involvement with scepticism shows. Husserl does not engage in the phenomenological reduction for the same purpose as Descartes. Instead he maintains that this attempt belongs to the sphere of complete freedom.³⁵ He stresses explicitly that his purpose is different from singling out a fully

³³ *Ideas* I, sect., 28.

³⁴ *Husserl: An Analysis of His Phenomenology*, p. 19.

³⁵ *Ideas* I, p. 54.

valid premise for the construction of the sciences of the world.³⁶ Husserl's task is the making explicit a new indubitable region of being, unnoted and hitherto undefined, the sphere of transcendental consciousness.³⁷ This is the aim of Husserl's modified Cartesian approach.

Nature

What then, is the status of nature and its relation to phenomenology in Husserl's philosophy, particularly in *Ideas I*? How is the idea of nature delineated? More precisely, if by way of the phenomenological reduction we exclude all considerations of the sphere that is designated as material reality then how does nature appear phenomenologically? After the abstention of judging about the world and the discovery of pure consciousness as the residuum of this abstaining we must seek to discover the status that Husserl gives to nature.

The correlative ideas of the world of nature and the region of pure consciousness are made possible only through their separation and division in the phenomenological reduction which distinguishes between natural theoretical experience of the world and its contents and the special seeing of these experiential objects as ideas or essences. That is, the essences of the objects of experience are understood as eidetic essences and as the datum of eidetic intuition.³⁸ But where the two ideas separate or go their own

³⁶ *Ideas I*, p. 64.

³⁷ *Ideas I*, p. 58.

³⁸ *Ideas I*, p. 11.

investigative routes is in their claims to factuality. Husserl comments:

Just as any thinking, any predicating, which concerns matters of fact needs experience to ground it (in so far as the *essence of well-foundedness* peculiar to such thinking *necessarily* demands this), so thinking about pure essences - unmixed thinking about them which does not connect matters of fact and essences - needs the seeing of essences as its *legitimizing* foundation.³⁹

Both thinking and judgements about matters of fact need objects about which thoughts are predicated while eidetic essences do not have to be grasped as objects as such. Yet, eidetic objects are not fantasies. Husserl claims that objects are the subjects of true propositions, empirical or transcendental.⁴⁰ They both belong to the universal concept of object.

Husserl does not insist that these two regions are not interrelated. On the contrary, it is precisely here that the idea of nature becomes involved with phenomenology. The sciences of the eidetic are not dependent on any findings given over by the empirical sciences but the sciences of the empirical sort always seek recourse to the eidetic disciplines. Husserl makes this quite clear in his distinction between the geometer and the investigator of nature. The geometer does not depend on matters of fact in order to secure the claims of geometry. The seeing of essences lays the foundation for the geometrical sciences. The investigator of nature, on the other hand, needs the grounding acts of experience in order to secure the claims of the natural sciences.⁴¹ Yet the empirical sciences are closely related to the eidetic disciplines. What Husserl is affirming

³⁹ *Ideas* I, p 13 - 14.

⁴⁰ *Ideas* I, p 41.

⁴¹ *Ideas* I, sects. 6 - 8.

is that all sciences of material reality are defined in their spheres of investigations - regional ontologies - by an eidetic discipline.

As for the case of nature there corresponds to it, Husserl claims, an ontology of nature as it is "the theme of a pure natural science; that is to say an objective science of nature..."⁴² That is, there exists for nature only predicatively formed eidetic claims. The cultural progression of the physical sciences of nature could only have developed alongside the development of geometrical sciences at an advanced eidetic level. Husserl claims of the sciences of nature that:

Their great era began in the modern age precisely when geometry which had already been highly developed as a pure eidetics in antiquity... was all at once made fruitful in the grand style for the method of physics.⁴³

What Husserl is insisting, and what will be the centre of reflection in the *Crisis*, is the understanding of spatial experience as geometrical form, the world as *res extensa*. It is the rationalization of the realm of the empirical and the development of eidetic ontologies. Thus so far, Husserl's claim for nature has only been to recognize nature as that which is subsumed under the formal essences which belong to the region of nature. The question of the status of nature has so far remained unproblematic. And we must comfort ourselves with the fact that Husserl is sparse with the examples he provides. Husserl's concern here is to disclose phenomenologically how the sciences of nature ignore their eidetic foundations.

⁴² Edmund Husserl, "Phenomenology" in Peter McCormick & Frederick C. Elliston eds., *Husserl: Shorter Works* (Notre Dame: University of Notre Dame Press, 1981), I, 1.

⁴³ *Ideas* I, p. 20.

For the scientific investigator of nature to hold the position that all assertions about nature be verified by an appeal to experience is not sufficient since Husserl insists that this claim is not "itself given with insight in experience - as is the case with every principle and every cognition of essence without exception".⁴⁴ But, how is this to be done if, by way of the reduction, we abstain from relying on pre-established scientific disciplines? That is, what becomes of nature if we, in following Husserl, exclude the findings given over by the sciences of nature.

In following the path of the phenomenological reduction Husserl does not deny the existence of the world that is taken for granted, rather he maintains that predications about the world - a world that is over and against us - are held in abeyance.⁴⁵ The focus is on the intentional acts of consciousness, transcendently pure consciousness, that are intently referred to the world as its correlate. That is, focus must be given to the twin themes of immanence and transcendence. The perception of something immanent is a reflection on the I think; an apprehension of a mental regard in the stream of mental processes. The transcendent is the result of the intently process of turning one's regard towards others and the physical world, for example. Together, this pair forms the single act of perception.⁴⁶ Thus nature is delineated, as that which is referred to pure consciousness which bestows both reality and unity upon it. The transcendental Ego is

⁴⁴ *Ideas I*, p. 45.

⁴⁵ Husserl's assertion here illustrates that Sang-Ki Kim's claim of the denial of the world by Husserl is not well founded, but results from a misreading of *Ideas I*. See: Sang-Ki Kim, *The Problem of the Contingency of the World in Husserl's Phenomenology* (Amsterdam: B. R. Gruner B. V., 1976).

⁴⁶ *Ideas I*, p. 68.

something necessary for the experience of nature or any object of perception. Let me explain.

Husserl is attempting to understand the intentional acts of consciousness in its perception of the world of material reality. A world that is understood as the different manners in which it is present to consciousness as sensuous appearances or adumbrations. This consciousness which has its own way of being is directed towards the being of the world in accordance with the Cartesian motif of *cogito* - I have consciousness of something, the act of the *cogito* in all its perceptions. The ground or source for all these perceptions is, Husserl notes, sensuous experience.⁴⁷ With this situation there is also the case of the Ego in its intensive regard.

If it is assumed that the intensive object of regard is the world of material reality, then Husserl is maintaining that the perception of the world is carried out in a binary manner. There is both the perception of the object, understood as transcendent, and immanent to this perception is the directedness of the Ego's mental regard. There belongs to the *cogito* its attentiveness to the object. This regard towards an object by the Ego allows Husserl to claim that the Ego is necessarily present in all acts of consciousness.⁴⁸ What Husserl is insisting is the interdependence between the apprehension of an object and the manner of heedfulness which directs the intentional act of the Ego which, in the mode of everyday regard towards the world, exists in a world of values and objects of every sort.

⁴⁷ *Ideas* I, p. 71.

⁴⁸ *Ideas* I, sect., 37.

In a reflective turn of regard, Husserl exhibits the immanent and transcendent aspects of the Ego's perception. What is immanent in the perception is the recognition of the perceiving itself while the transcendent is an act directed towards realities of all sorts. From this recognition he claims that "*perception and perceived form essentially an unmediated unity, that of a single concrete cogitatio*" and that "the perceiving includes its Object in itself in such a manner that it only can be separated abstractively..."⁴⁹. It does appear that Husserl is insisting that, in the case of nature, consciousness and physicalness combine to form a unity, a unity which forms the Ego in its intensive states. Now clarification must be given to Husserl's phenomenologically modified sense of nature. How the transcendent relates to a consciousness which is conscious of the transcendent must be explained.

Any recourse to physics or the domain of theoretical thinking is precluded by the phenomenological reduction. The level at which the interconnectedness of the immanent and transcendent is examined is intuition. Intuition here means the grasping of the object in a manner that is not complete or exhaustive but subject to further verification. But at the same time, it is the grasping of the immediately given in its essence or *eidōs*.⁵⁰ The essence of an object is the unravelling of the sense of the mental acts that are employed in the mental seeing of the object. This unity of thought is not explained as a sign theory

⁴⁹ *Ideas* I, p., 38.

⁵⁰ Jan Patočka, "The Husserlian Doctrine of Eidetic Intuition and Its Recent Critics" in Peter McCormick & Frederick A. Elliston eds. *Husserl: Exposition and Appraisals* (Notre Dame: The University of Notre Dame Press, 1977), pp. 150 - 159.

of language nor is it a symbolic representation of thought.⁵¹ Husserl maintains that the sensuous world is given over in changing multiplicities of appearances which form unities due to retentive acts of consciousness. It is the perceptive act which is in flux and it is the object which transcends perception. The transcendent relates to the immanent in that it is intended as a unity in the multiplicity of perceptions. Husserl states:

Each determination has *its* system of adumbrations; and each of them, like the physical thing as a whole, is there as the Same for the seizing-upon consciousness which synthetically unites memory and the new perception as the Same, despite any interruption of the continuous course of actional perception.⁵²

These moments, in the construing of an object, are inherent in the appearance of objects and unite the appearances in consciousness as one and the same intensive object and identify it as one and the same object, even though it is recognized that there are fundamental differences between the object as mental process and the object as material thing, as they are presented in their modes of appearance. They are differentiated by their modes of givenness. Though the transcendent is indeterminate, it is subsumed under immanent or essential consciousness which anticipates various perceptual changes. This is the essence of the correlation of the transcendent, nature for example, and the perception of the transcendent. No perception of the physical world reveals anything absolute, it is contingent with respect to the course of experience.

So far, Husserl has secured the primacy of the transcendental Ego's consciousness of the world. Secure in the discovery of pure consciousness, Husserl insists that

⁵¹ *Ideas* I, sect., 43.

⁵² *Ideas* I, p. 75.

consciousness would still be present even if the transcendent world were excluded. Thus, immanental consciousness is absolute in its being.⁵³

A transcendent being is not necessary for the existence of consciousness itself. The being of the world is, what it is, by virtue of its relation to consciousness.

The sphere of absolute consciousness and its relation, in its primacy, to the transcendent world is effected by way of the phenomenological reduction of consciousness with the exclusion of nature. But nature is excluded only so transcendently pure consciousness can be revealed as something which is distinct from nature. But nature still remains. Husserl insists that

Nature is possible only as an intentional unity motivated in transcendently pure consciousness by immanental connections.⁵⁴

And

Still, as every naturalist knows, that does not mean that any province of reality is isolated; the whole world is ultimately a single "Nature," and all the natural sciences are members of the one natural science. The situation is fundamentally and essentially different in the case of the domain made up of mental processes as absolute essentialities.⁵⁵

The upshot of this, for Husserl, is discovery of nature as a correlate of consciousness, made possible as being, only by the sense formation of the regular sense adumbrations of consciousness. This consciousness is absolute in its relation to nature, Husserl claims, since consciousness makes the world present for the transcendental Ego in its intensive acts. How is nature constituted from the position of pure consciousness?

⁵³ *Ideas I*, p. 92.

⁵⁴ *Ideas I*, p. 95.

⁵⁵ *Ideas I*, p. 96.

Husserl attempts to explain an idea of nature as the whole of material nature, as it appears sensuously, and as nature as it is determined at a higher level of cognition by physics. Husserl admits that nature is present subjectively, not as mental processes, but as the sensuously appearing world as it is present to consciousness. But we cannot claim that the appearing nature is just an appearance of the true nature which is determined by physics. Husserl claims that one must stick to what is presented with sufficient evidence. He notes also that theories which posit a world behind the world are possible

(O)nly as long as one avoids seriously fixing one's eyes on, scientifically exploring, the sense of a physical thing-datum and, therefore, of "any physical thing whatever," a sense implicit in experience's own *essence*...If anything runs counter to that sense it is countersensical in the strictest sense of the word...⁵⁶

Thus there is no special world behind the world expressed as nature, rather there is the same world, precisely the perceived world, which is scientifically determined by following the sciences of nature. In a sense Husserl is maintaining that there are two compatible presentations of nature: sensuously experienced things and their theoretical determinations.

Husserl is quick to point out that theoretical constructions cannot determine the sphere of nature. This is a question of what is legitimate as an intentional correlate of nature. Husserl readily accepts the *cogito* as a legitimate correlate of sensuous appearances but he seems to reject any consideration of logical reason as an intentional correlate. In Husserl's words: "If reason...fashions the Nature determined by physics *out of* simply appearing Nature - then we rightly call it mythologizing..."⁵⁷ Husserl rigorously

⁵⁶ *Ideas* I, 98.

⁵⁷ *Ideas* I, p. 101.

defends the claim that there can be no intellectualization of nature for the purposes of explaining it causally.

From the standpoint of pure consciousness nature is not determined causally. More importantly, Husserl is claiming, for pure consciousness, a field which is distinct from any dealings with causality since Husserl thinks it is nonsensical to connect the totality of nature as the totality of consciousness determined by experiential logic. What is the case is that the physical explanation of material nature is an explanation of a nature that is tied to pure consciousness.

Thus, the world of nature is given over not only as physical reality, but as a psychophysical reality. There is pure consciousness, which as absolute, designates the world as transcendent, and there is consciousness which is a component part of material reality. Belonging to nature is its transcendency, a transcendency which is effected by consciousness. Husserl explains:

Only by virtue of its experienced relation to the organism does consciousness become real...consciousness, and thereby does it acquire a place in the space belonging to Nature - the time which is physically measured.⁵⁸

There is the corporeal world which appears by virtue of sensuous adumbrations which is co-present with consciousness. Consciousness is also a component part of nature but radically distinguished from nature by its absolute essence.

The discrete intertwining of consciousness and material reality allows Husserl to say that the unity of nature is essentially the unity of the sense bestowed on it by

⁵⁸ *Ideas I*, p. 103.

consciousness in intentional acts. By this, Husserl does not deny any of the reality that belongs to nature.⁵⁹ He merely states that: "The exclusion of Nature was for us the methodic means for initially making possible the turning of regard to transcendently pure consciousness".⁶⁰ Thus any search for the intelligence of the world must not exclude the investigations into pure consciousness which bestows sense, as a unity of sense, to the intentional objects under consideration. Rather, after understanding, in its phenomenological form, what it is that sensuously appears as nature, Husserl's investigations turn towards the problems encountered in gaining a theoretical understanding of nature. The world of the natural attitude is shown to be more comprehensive than its positivistic limitations. It is Husserl's attempt at illustrating the shortcomings of the scientific idea of nature by approaching the being of the world through intuitive understanding, that is, phenomenologically.

Summary and Transition

Husserl's remarks on the idea of nature can be summarized as follows: Access to what is designated as nature is made possible only through the enacting of the phenomenological reduction with respect to the world understood in the natural attitude. Under the application of the phenomenological reduction nature is understood as being co-present with all intentional acts that are focused on transcendental objects. And we must be clear that all remarks concerning Husserl's reflections have been carried out from

⁵⁹ *Cartesian Meditations*, p. 140

⁶⁰ *Ideas I*, p. 108.

the stand point of the Cartesian *cogito* understood transcendently. It is precisely this *epoche* which radically alters the appearance of nature. Almost any attempt to characterize nature would make recourse to scientific disciplines in order to secure the claims of a regularity in nature. It does seem that any definition of nature would have to include the idea of regularity in order for it to be viable. But Husserl drops the notion of regularity or causality, as it is an aspect of the natural attitude, in his investigations into pure consciousness's intuition of nature. This is not to say that the repeatability of natural events is denied by Husserl, rather investigations into the essence of consciousness need no recourse to natural events.

Yet, it is precisely the phenomenologically defined relationships between the consciousness of the world and this world that is understood under the paradigm of physics that is so interesting. The world of material reality cannot alone be reduced to mere *res extensa*, the world is a bestowal of sense formations apprehended in a bestowal of predicative acts.⁶¹ Phenomenology, in its attempts to delineate the concept of nature, does try to do so from a standpoint that is not involved with the sciences of the natural attitude. That is, Husserl is not trying to revive some mythical pure notion of nature prior to natural scientist's involvement with it. The world of nature is understood from the standpoint of how it presents itself to consciousness in intensitive acts. But it is an intensitive act that is intimately involved with theoretical idealities.

Thus, we can see why Husserl claims that nature is the intentional correlate of an

⁶¹ Charles W. Harvey, *Husserl's Phenomenology and the Foundations of Natural Science* (Athens: Ohio University Press, 1989), p. 42.

ontology of an objective science of nature.⁶² If we press this idea, we can see that Husserl is stating that our idea of nature is possible only through the involvement of physics in the investigation of its essence. In order to see the relation of the phenomenology of nature to the problem of the constitution of nature, we must begin with Husserl's analysis of the constitution of nature in *Ideas II*. The fundamental thoughts of the first section must be presented in a shortened and simplified form in order to open up the following questions: what is to be found in this analysis of the determination of the essence of nature; how are these results presented in Husserl's reflections; and what additional consequences can be drawn from these reflections?

In the second volume of *Ideas*, the idea of nature that is presented in *Ideas I* is raised in connection with the scientific-theoretical problem of gaining an understanding of the basic regional concept of material nature which demarcates the exact natural sciences. To this end, Husserl insists that there must be exhibited those functions and accomplishments of consciousness, which are the unique basis for something like material nature to be given in its universal *a priori* essence. In order to open up nature to our gaze, a specific interest and attitude corresponding to it are presupposed, namely the natural attitude of our everyday existence. The latter attitude is, in the strict sense, not an attitude which is first selected, rather it is the fundamental frame of reference found in everyday life.

Here also, are the beginnings of a theme that would occupy Husserl in the *Crisis*. In the course of the analyses, Husserl attempts to show, step by step in his approach to

⁶² *Ideas II*, p. 1. (original pagination)

the constitution of the world as nature, that the observer of nature cannot encompass his own psychic life with the categories that function very well in portraying intuited nature apprehended in the natural scientific attitude. The *Crisis* is a response to the dominating effect of positivism on all disciplines which effects a denial of the posing of ethical questions in the natural attitude as Husserl understands it.

The correlate for this frame of reference is our world with its value, goods, and so forth; the correlate of the naturalistic scientific attitude are the things taken as mere things. As such, they are given to us through the senses in the mode in which they themselves appear immediately in sensuous intuition, that is, they are given in a way which disregards what they are actually mean for us as objects of utility, as works of art, and so on. In this sense, the appearing of material nature is the primal reality. It is, no doubt, acquired by disregarding all properties resulting from its use and all value predicates. Yet it is the primal object in the sense that all predicative values presuppose the sensuous presence of the bearer of such predicates.

What is understood by material nature can be acquired only through an analysis of the accomplishments in which a sensible object is constituted as such. The manner in which the perceived thing shows itself to us - as actually changing in its adumbrations and perspectives - is taken as different ways of being conscious of one and the same thing. The phenomenological clarification of the status of nature vis-a-vis the exact natural sciences. in contrast with the phenomenological attitude, is the theme of the following chapter.

Chapter II

Nature and Sciences

Edmund Husserl's *Ideas II* projects the idea of nature in a manner which compensates or balances the *a priori* illustration of nature as found in *Ideas I*. The investigative regard here is the application of phenomenological investigations to the whole of reality. Husserl is trying to illustrate the intimate connection between the world, understood as the world in its totality, and consciousness which apprehends the world. His question is "precisely how are nature and the perception of nature, to be determined?"⁶³ Nature must be clarified with regards to its essence and the predications which are made of it as the correlate of the idea of natural science. Whether or not it is obvious, Husserl insists that natural science is founded upon the idea of an essence of nature. An essence that is demarcated by the systematic removal of all predicates save those sanctioned by the discursive practices of natural science. Prior to this, and correlative to the idea of nature is consciousness which determines "what is or is not a natural-scientific Object, hence what is or is not nature in the natural-scientific sense."⁶⁴ That is, what is objective is characterised on the basis of the intensitive act. In order to gain an understanding of nature, the natural-scientific attitude must be examined in its constitution of nature as an object for theoretical investigations. The theme of this chapter is the elaboration of Husserl's

⁶³ *Ideas II*, p. 1.

⁶⁴ *Ideas II*, pp. 4 - 5.

concept of nature and we must indicate why this idea of nature becomes problematic for Husserl.

Nature

Husserl's first step in gaining a concept of nature is to circumscribe *a priori* the field of what belongs to nature by the type of interest or attitude that is correlative to it. We are not certain of the specifics of the objects which belong to nature though we can discern the consciousness which intends them. In this way we have an idea of nature, a signpost for the regional ontology which will be elaborated.

This attitude, which Husserl defines as the doxic-theoretic attitude, is called experience (*Erfarung*). He maintains that this experience is positing of the subject and therefore the predicate of theoretical acts. The Ego is directed towards the object in a theoretical manner which grasps things in their objectivity.⁶⁵ Experience is more than perception since the sense of perception appears only by the reduction of certain aspects of experience, a reduction that uncovers the deficient aspects of experience.

In experience we are already on the level of a perception permeated with a thesis, that is to say with a believing that posits its object as being. We live through perception by giving credit to the sheer presence of material nature to the point of forgetting the relation of consciousness to the intended object.⁶⁶ This believing (*doxa*) has certitude as

⁶⁵ *Ideas* II, p. 10.

⁶⁶ Alphonso Lingis, "Intentionality and Corporeity," *Analecta Husserliana*, Vol I (Boston: D. Reidel Publishing Company, 1970), p. 76.

its fundamental mode, the correlate of which the index is objectivity.⁶⁷ In fact believing is a crediting prior to an explicative judgement, properly so-called, which takes a position with respect to truth and falsehood. This is the "thetic" or positional character, which, when grasped, can be neutralized or suspended. Consciousness, instead of being taken in by its world, reconsiders itself with respect to this constitutive power and discovers itself as the source of this positing or giving. At the same time the world is reduced to its sense for consciousness, unburdened by the idea of its being. This turn is implicit in the constitution of nature.

If, in one way, experience is richer than what appears as simple perception, Husserl notes it is poorer in another. On its theoretical side it proceeds by abstraction from all affective and practical aspects that reality owes to my evaluational and volitional activity. What is essential for the constitution of nature are theoretical acts which, with a determinative function, form the foundation for emerging higher level theoretical acts. Ignoring, in a positive manner, the good, the beautiful, and the valuable the natural scientist tries to take the stance of the disinterested spectator. With the aspect of value removed, the aspect of corporeality still remains. Husserl writes:

Yet we do gain such an *a priori* closed idea of nature... provided we become purely theoretical subjects, subjects of a purely theoretical interest, and then proceed to satisfy that interest. Of those value-charged things, we experience only their stratum of spatio-temporal materiality; and similarly, of...human societies, only that stratum of this "psychic" nature which is bound to the spatio-temporal "Bodies."⁶⁸

⁶⁷ Enzo Paci, *The Function of the Sciences and the Meaning of Man* trans. Paul Piccone & James E. Hansen (Evanston: Northwestern University Press, 1972), pp. 73 - 75.

⁶⁸ *Ideas II*, p. 25.

Thus, Husserl is insisting that nature exists for the theoretic subject in a manner such that humanity's evaluations do not interfere with the scientist's concern since they are not constitutive of the idea of nature. But, by the same regard, in the performance of natural science, all valuative considerations of practice are set aside as well.

Simultaneously, by an act of trust and distrust, by an act of positing and an act of reducing one becomes a scientist. We confer the status of reality upon nature and withdraw the valuable. Husserl calls this twofold conscious performance objectivation. This objectivation, once begun in the area of things, can return to what it excluded and engage in a conquest of the affective, axiological, or practical predicates and then incorporate them, in turn, into theoretical knowledge.⁶⁹ And so the process of objectivation, by which the natural scientist posits and delimits nature, goes beyond nature itself, but always according to the model of nature. What then is the status of nature with regards to theoretical experience?

Nature, which shows itself in ever-changing perspectives, appears in the course of theoretical experience as one and the same object. When nature is analyzed as a perceptual object it is treated as having an essential lawfulness in the sequence of its appearances. In Husserl's words: "The thing is a regulation of possible appearances."⁷⁰ Perceptual nature cannot be given in any other manner and any meaningful talk of material nature legitimizes itself by referring back to this manner of givenness. In the analysis of the constitution of material nature the relativity of its appearing shows itself

⁶⁹ *Husserl: An Analysis of his Phenomenology*, p. 49.

⁷⁰ *Ideas II*, p. 86.

in the momentary apprehension of the sensuously perceiving subject, in the normal or abnormal functioning of the Ego's sense organs.

However the motivation for the objectivation of material nature, that is, its scientific determination in the sense of the exact natural sciences, already lies in its manner of givenness. In order to reach agreement with others concerning what appears relative to our sense organs we need a method of determining sensuously perceived things in concepts and judgements, which can then be performed by each subject capable of thinking regardless of the functioning of one's sense organs. Exact scientific determination wants objective truth comprehensible for all cognizing subjects. The natural scientist does not speak of sensible qualities that belong to nature but of regulative laws, and so forth. But in the last analysis all these determinations are again related back to sensible objects and occurrences appearing in intuition. Thus the natural scientist does not construct a world which lies behind the world of sensible nature, instead the scientist develops a method which determines the realm of sensible nature in an unconditional universal manner. Things and events are specified by reference to the laws of their appearing: occurrences in which they so appear can themselves be introduced and their effect in the course of nature can be predicted exactly.

The objects subject to such determinations are already pre-given in perceptual apprehension. They are the primal objects. This manner of comprehending them, which in itself already motivates the theoretical comprehension of material nature - a mode of comprehension whose end is a universally communicable determination - is specifically designated by Husserl as that of the theoretical attitude; it requires nothing from the

objects, it does not want to grasp them according to their utility, etc. Rather the leading interest is material nature as it appears.⁷¹

Nature, Husserl maintains, is pre-delineated or traced out *a priori* in the essence of the constituting consciousness which demarcates it as a sphere of mere objectivities. It is distinct from all other objectivities which may be treated theoretically. Thus nature is constituted as separate from all value predicates, etc. But this is not an arbitrary act, though it is spontaneous. What is required for the elaboration of a self-enclosed nature as a domain of theoretical interest is a theoretical position which is satisfied in its interests. Husserl states:

*(T)his subject does value the knowledge of appearing being and the determination of that being by means of logical judgements, theories, science. Thus it values the "It is so," the "How is it?" Furthermore, it does attach values to matters of practice, too; it is indeed interested in transformations...by means of experiments.*⁷²

Thus, what may have appeared as a purely disinterested position has now been phenomenologically exhibited as a position which is motivated by the value of apprehending nature by means of theoretical experience which secures a theoretical model of nature. And the findings of these theoretical interests determines what the appearing nature is.

The term nature therefore designates the constitution of all classes of objectivities in their unity. Nature, Husserl maintains, does not contain any valuative acts performed by the subject since there are no value objects in nature. According to Husserl the term

⁷¹ *Ideas II*, p. 26.

⁷² *Ideas II*, p. 26.

nature

(D)enotes a class of objects which, as regards their coexisting exemplars, join together, by essential necessity, to form a really connected unity, whereby at the same time it is characteristic of these objects that a valuing consciousness, as "constituting," has contributed nothing to their essential composition...⁷³

That is, objects are constituted only through specific acts in doxic objectivating consciousness, they are not determined by valuative acts. Thus, the objects which are experienceable through such doxic acts are the objectivities which comprise nature, nature understood as an essential unity of objects.

The general aspects of Husserl's intuition of nature are as follows: (1) For Husserl, the natural sciences do not present absolutely new problems in the perceptual constitution of a material thing. It is, rather, the latter entity that the phenomenologist must interrogate instead of subordinating the percept to what is scientifically known. Thus *Ideas II* accentuates the tendency in *Ideas I* to replace the interest in a philosophy of science with an interest in the phenomenology of perception. (2) On the other hand, perceptual consciousness stimulates scientific consciousness by its own relational character since the concept of causality has its roots in a perceived relation of dependence among intuited properties related to perceived circumstances. (3) Thus a phenomenology of the constituted world of nature is possible because the constitution of material nature includes an essence that can be grasped by way of specific examples. Husserl justifies his comments, rightly or wrongly, about nature by an appeal to a theory of essences. For Husserl there are *a priori* significations such as extension, reality, and materiality, that

⁷³ *Ideas II*, p. 26.

are grasped in the constituted objects by direct inspection.

Yet this claim to reach the essence of nature and to decipher the essence of nature by an appeal to eidetic intuition poses a problem that remains unconsidered by Husserl in both the *Ideas* texts. The structure of the ideas of nature that is elaborated by science has a progressive history, and Husserl would not expect the structures exhibited by the phenomenological method to have just such a history. For this reason it is necessary for Husserl to root the idea of nature in the intentional structures of perceived experience.

But, during the period of the *Crisis*, Husserl seems to have considered this position a difficult one to maintain. On the one hand, Husserl is obliged to accentuate the side of the *Lebenswelt* or life-world, and emphasize its phenomenological function. On the other side, Husserl is obliged to emphasize the rupture introduced into the reading of nature by the Galilean revolution, i.e., the mathematization of reality. Hence, Husserl has to place in question the continuity between perception and science and let the scientific vision of nature play the decisive role. At the same time Husserl found it necessary to introduce the *a priori* of the apprehension of nature into a history of culture and to formulate the many difficulties that history introduces into a phenomenology of essences.

Ideas II sheds some insight into the relation between the perceptual apprehension of nature and the understanding of nature, by the natural sciences, with the purpose of expressing the discontinuity between the two. This change of perspective appears when one considers another dimension of the percept, namely, its relation to the historically changing ideas that objectify it. It is from this new angle that Husserl describes the separation between the perception of nature and the objectivity that is assigned to nature

by the natural sciences. Thus we must focus on why the consideration of history in the elaboration of an idea of nature creates such a problematic idea of nature for Husserl.

History and Science

In *The Crisis of European Sciences and Transcendental Phenomenology*, Husserl takes the idea of nature, which has been already formulated in the *Ideas* texts, and fashions the concept of nature anew by considering its teleological development in the history of science. What I understand Husserl to be doing, in part, in the *Crisis* is tracing out the historical constitution of the concept of nature. That is, Husserl is questioning the historically current concept of nature in order to understand the meaning that is contained within its usage. Yet we must be clear here, and recognize that Husserl is neither doing a history of the philosophy of science nor is he writing a history of nature as a referent. There are other motivations for the subsumption of nature to teleological-historical reflections.⁷⁴ Husserl, I think, is summoned by history to interpret his previous work in phenomenology historically.

Nothing in Husserl's foregoing work would appear to prepare his turning phenomenology in the direction of a phenomenology of history. Rather there seem to be reasons for its never turning in that direction. In the *Ideas*, the concept of nature that Husserl uses appears as if it were already formulated. And we can note how cautiously he employs the term "origin". In *Ideas* I Husserl is careful to observe that

We are not talking here in terms of history. The word for origins

⁷⁴ The deeper motivations of Husserl are discussed in greater detail in the following chapter.

neither forces nor authorizes us to think of any genesis understood in the sense of psychological causality or in the sense of a historical development...⁷⁵

For Husserl, the notion of origin cannot reappear except at another stage of thought, the transcendental stage proper, where it no longer signifies a historic-causal genesis but rather grounding acts.⁷⁶

Thus, at the stage of *Ideas* I and II, there is no privileged place for history. On the contrary, the historical sense that belongs to the Ego is a moment, a level of mundanity, an aspect of the constituted world, since in this sense the Ego is included, like any transcendence, in absolute consciousness.

The appearance of a concern for history in the last phase of Husserl's writings raises a number of questions the most important of which raises the question of the possibility of a philosophy of history in general.⁷⁷ Here we have Husserl unaccustomed to political concerns - apolitical we could say - who comes to an awareness of a collective crisis of humanity, a thinker who no longer writes only of the transcendental Ego but also of European humanity, its destiny, its possible decline, its necessary rebirth, a philosopher who situates his own philosophy in the history of Western Reason with the conviction that it is responsible to European humanity and that his phenomenology can show humanity the way to a spiritual renewal. Not content to think about history, Husserl the phenomenologist assumes the surprising task of trying to found a new age. In part,

⁷⁵ *Ideas* I, p. 7 n.

⁷⁶ See: *Ideas* I, Sects. 56 & 122.

⁷⁷ David Carr, *Phenomenology and the Problem of History: A Study of Husserl's Transcendental Philosophy* (Evanston: Northwestern University Press, 1974), p. 63.

the crisis of which Husserl speaks is founded upon the relation between nature and positivistic sciences. It is to this matter which we must turn.

Science

In the *Crisis*, Husserl's specific aim is to map out a set of considerations concerning the denial of the sphere of values from the activities of natural or positivistic sciences. Husserl's focus is on the mathematization of nature that begins with the rise and triumph of Galilean science and the subsequent development of systematic philosophies, which, in their development, ignored the original goal that Husserl sees for philosophy: to provide a unified foundation for science. And, in a sense, Husserl's teleological reflections are an answer to the question of what developments were necessary for the conception of nature that is outlined in both volumes of the *Ideas*. Husserl's thesis is, I think, if philosophy has ignored its proper task then the status of positivistic sciences, in its conception of nature, lacks the proper foundations for the completion of its goals. Let us consider the historical events the allow Husserl to see a crisis in science.

At the beginning of the *Crisis* Husserl asks:

A crisis of our sciences as such: can we seriously speak of it?...This may be true of philosophy, which our time threatens to succumb to skepticism, irrationalism, and mysticism. But how could we speak straightforwardly and quite seriously of a crisis of the sciences in general...⁷⁸

Husserl recognizes that sciences, sure of their methods, have reasons for protesting against those who speak of the crisis of science. The crisis of which Husserl speaks, however

⁷⁸ *Crisis*, p. 3.

does not concern science alone. Rather it concerns what they have meant, mean, and could mean for human existence.⁷⁹ According to Husserl, regardless of the sciences' continued successes, a crisis of science does exist. The crisis of science does not concern the sciences alone. It has a deeper significance for humanity because the enigma of subjectivity reveals itself in an undeniable way. For Husserl, this enigma decides both the content and the method of natural science, and subsequently influences the method of other sciences, such as the cultural ones.⁸⁰

The enigma of which Husserl speaks can be represented in the following way: Historically, Husserl recognizes the Renaissance as the decisive turn in the history of European humanity where there is a refutation of the Schoolman's ideas of the medieval era and a call for the return to the task of ancient philosophy: the achievement of reason as opposed to *doxa*. This period represents the genesis of the idea of a universal philosophy founded on pure reason. The growth of philosophy as the establishment of a unified theoretical system, exemplified in Descartes, subsumes all meaningful questions to a rigorous scientific interrogation. Husserl claims of the Age of Enlightenment:

Growing from generation to generation and forever, this one edifice of interrelated truths was to solve all conceivable problems -problems of fact and reason, problems of temporality and eternity.⁸¹

For Husserl, this theoretical reason is the genesis of positivistic reason, reason which drops the questions of metaphysics and occludes these questions as problems of reason.

⁷⁹ *Crisis*, p. 5.

⁸⁰ *Crisis*, sect. 2.

⁸¹ *Crisis*, p. 9.

Questions which pass beyond matters of fact are decapitated by positivism's empirical stance and add to the growth of the antinomy between subjectivism and objectivism.⁸² That is, the friction between problems of reason and problems of fact resolves itself in the dissolution of philosophy as a unitary ground for science and the capitulation of metaphysics by natural science. The skepticism of empiricism takes as its foundation factual experience and repudiates metaphysics, it makes the that which is - the surrounding world - enigmatic.

The central position of natural science, with respect to the other sciences consists precisely in this: it makes the complete reduction of all that is subjective while it reduces the subjective world, the world of primal meaning in Husserl's sense, to a mere mathematical plenum, an accomplishing act which has its roots in the new science of Galileo. Husserl remarks that his reflections on Galileo are directed towards his intellectual accomplishments and what they mean, rather than the historical figure of Galileo. Thus Galileo is representative of the transformation of thought that is associated with his name.

According to Husserl, Galileo substitutes the categorial dimension of mathematics for the truly experienced and experienceable world, i.e., for the real daily world, the *Lebenswelt*. Idealized nature thus becomes superimposed on prescientific, intuitive nature.⁸³ He writes:

[But] through Galileo's *mathematization of nature, nature itself is*

⁸² R. Philip Buckley, *Husserl, Heidegger and the Crisis of Philosophical Responsibility* (Boston: Kluwer Academic Publishers, 1992), p. 17.

⁸³ *Crisis*, p. 50.

idealized under the guidance of the new mathematics; nature itself becomes - to express it in a modern way - a mathematical manifold [*Mannigfaltigkeit*].⁸⁴

Every mathematical accomplishment arises from the pre-categorical environment, from the surrounding world in which each of us lives, from the pre-predicative *Umwelt*. Every mathematical hypothesis has a goal and is part of the life-world by virtue of its referential nature. Yet Husserl claims that in the life-world we find neither geometrical space nor mathematical time. Generally speaking, we find no idealizations in the *Lebenswelt*.

Galileo, Husserl insists, applied the already formulated science of geometry to nature in order to conceive of its mathematical limits for the purpose of ever more determinate measurement. Geometry is thus the methodology for objectively determining nature in approximation with geometrical form. The world of experienceable nature with its subjectively varying form is disregarded in favour of a methodology which establishes non-relative truths about the sphere of nature. That is, there becomes developed a model which determines, sets out in advance all the changes that occur and can conceivably occur in nature. It gives a universal causal style to nature, a nature that is objectified. Husserl asserts that the positing of objective nature is possible for two reasons.

First, the idealizing the world of nature, geometry creates in advance ideal shapes. Geometry, according to Husserl, predelineates "an infinite totality of ideal objects" which are "determined in advance".⁸⁵ The method of Galilean physics is created from evidences which are generated as *a priori* evidences therefore ordering the manifold of empirically

⁸⁴ *Crisis*, p. 23.

⁸⁵ *Crisis*, p. 32.

intuitable nature. Second, Galilean physics in its application of geometrical idealities to the empirical world discovers a new source of knowledge and discoveries, a knowledge which is based on the achievements of geometry which sets out in advance to determine the world but is, itself, not experienceable in what it discovers. Husserl maintains that geometry sets up the world as *res extensae*. Proceeding from this understanding one can make inductive predictions based on the real, that is, one can apply apodictic geometrical truths to intuited nature with the expressed goal of gaining precision in empirical measuring.

Yet, Husserl argues that the objectivation of the world of nature vis-a-vis Galilean physics is an hypothesis, one that is quite remarkable, which has been, and is being constantly verified. Husserl also maintains that the history of discoveries in nature is a history of hypotheses and subsequent verifications. By having the formulae presented in advance, one has the sphere of nature laid out in advance as well. Husserl also cautions against exceeding the limits of the application of a formulaic method to determine a true knowledge of nature. What must be avoided is accepting a set of formulae for true being itself. He claims

This process of method transformation, carried out instinctively, unreflectingly in the praxis of theorizing, begins in the Galilean age and leads...to the highest stage of, and at the same time a surmounting of, "arithmatization"; it leads to a completely universal "formalization."⁸⁶

What Husserl is maintaining, I think, is that with Galileo there has been, and continues to be, a substitution of the ideal mathematical world for the intuited everyday world of

⁸⁶ *Crisis*, p. 45.

experience. That is, with Galilean physics there has been a supplanting of the experienced and experienceable world by a substructured world of mathematical idealities. Instead of the subjectively experienced world we now have the sphere of nature presented as a self-enclosed world of bodies exhibiting self-enclosed causality in which every occurrence is anticipated in advance. Intuited nature, in its subjective - relative appearance in the life-world, is replaced by idealized nature and the meaning of nature is transformed into a mathematical manifold.

To what extent does science itself grow out of this style of the prescientific life of the life-world and to what extent does science serve its goals? The predictions of science surpass the accomplishments of everyday predictions; they are predictions "extended to infinity."⁸⁷ Thus, all praxis involves inductions; it is the case that ordinary or average everyday predictive knowledge is artless when compared to the artful methodological inductions which can be carried through to infinity by way of the method of Galilean physics. To what extent does the life-world remain unchanged despite the transformations of the world through science?

The transformation arises because the goals and accomplishments of science, as goals and ends, flow into the life-world.⁸⁸ Through this influx the life-world becomes a world changed by historical conditions. The core of it, however, does not change. Husserl writes

[T]he scientists are themselves men in the life-world, men among men. The life-world is the world for everybody; and thus the sciences

⁸⁷ *Crisis*, p. 51.

⁸⁸ *Crisis*, p. 131 -132.

which are, first of all, the worlds of the sciences, are there for all men as a product gained us..., they are there for everybody just as the life-world is there for everybody.⁸⁹

This means not only that humanity lives with these new means of prediction as a humanity which sets up and strives towards certain accomplishments. The transformation of the world through science itself becomes visible in the perception of things and events brought forth by science. These things and events are themselves perceivable in the life-world, the sensuous world of our corporeal bodies and perceptions. In all historical transformations of the world through the deeds and accomplishments of humanity, whether or not they rest upon the methodological induction of the sciences, the world that is present as the referent of all our activities stands prior and retains an invariance and a style by virtue of it counting as a world for everybody.

How are these extensive predictions carried out by science? Husserl argues they come about because

[W]e measure the life-world - the world constantly given to us as actual in our concrete world-life - for a well fitting *garb of ideas*, that of the so-called objectively scientific truths. That is, through a method which (as we hope) can be readily carried out in every particular and constantly verified, we first construct numerical indices for the actual and possible sensible plena of the concretely intuitable shapes of the life-world, and in this way we obtain possibilities of predicting concrete occurrences in the intuitively given life-world, occurrences which are not yet or no longer actually given. And this kind of prediction infinitely surpasses the accomplishments of everyday prediction.⁹⁰

Here Husserl not only characterizes the Galilean method of the hypothesis with its verification in the experiment, but he also emphasizes that these ideas - for instance, the

⁸⁹ *Crisis*, p. 446

⁹⁰ *Crisis*, p. 51.

idea of a straight line and homogeneous movement - are our project. Our project is, in this sense, *a priori* in relation to the world, for our experience of the world along the lines suggested by the sciences depends on our ability to construct such a project. Science, from its origin at the beginning of the Age of Enlightenment, is derived from the presupposition that it can know the world in a manner which supersedes the relativity of sensuous experiences and the opinions (*doxa*) grounded in it. Nature understood in this way requires, in addition, the hypothesis of being-in-itself. But, in fact, Husserl states that this hypothesis is only "*one* among the many practical hypotheses and projects that make the life of human beings in this life-world."⁹¹ That is, the hypotheses of natural science and its setting up of nature as a mathematical manifold are features belonging to the life-world that is present for all of us as the centre of our activities.

The sciences and philosophy, at the beginning of the modern era, did not take the idea of a world of nature as existing in itself as a hypothesis. Because of this, they, at the very beginning, fell under the metaphysical spell of a concept of true being, an inversion of true being, one which took it to be a permanent and persisting being-in-itself behind this changing and fluctuating world of belief (*doxa*) and of perceptual illusion and prejudice.⁹² The modern sciences were convinced that the scientifically explicated world was the true world. Here we can see the historical dimension applied to the idea of nature that Husserl articulates in both volumes of the *Ideas*.

⁹¹ *Crisis*, p. 131.

⁹² *Crisis*, p. 131.

Summary and Transition

The role that nature plays in both volumes of the *Ideas* has been explicated, in its barest elements. Drawing on remarks made in the *Crisis*, I have tried to show two features that are necessary to an understanding of nature: the pure experiential, or *a priori* features of consciousness that are essential for an understanding of nature and constitutional features of consciousness that must be present for an theoretical understanding of nature. Such an insight into nature, understood this way cannot be ignored when ecology tries to first formulate an object of inquiry into problems of nature. This is all the more important when we consider Husserl's reflections on the mathematization of nature since he reveals a primordial sense of what nature is. What I mean is that Husserl presents a method, a method which is scientific, where a new understanding of nature may be gained. Husserl's historical reflections on the development of the constitution of nature allow a way for nature to be understood in a novel manner; one that does not rely on hypotheses advanced by natural scientific practices.

We have revealed Husserl's historical account of the static ideas of nature that are characterized in this, and the previous chapter. In other words, we have sketched the historical developments that Husserl saw as necessary for the formulation of the idea of nature as a closed sphere of bodies governed by laws of regularities. Also, we have seen how this idea of nature became problematic for Husserl and hopefully we have seen why such a concept of nature is problematic for those that write about ecology. The world of ideal nature is presented as the only "true" world, its regulative functions, while all claims

of sensible adumbrations are dismissed as just that so they may be investigated by natural science. Hence the vicious circle of natural science trying to correct the accomplishments that it strives to reach. The ideal world of nature, as being-in-itself, displaying its ideal causal relations needs only a new cause to bring about improving effects. In short, all discursive practices about ecological problems take as their object a nature which is presupposed as existing on its own; it is being-in-itself.

As we have seen, Husserl speaks of the conviction of the being-in-itself of nature as objectivation and he feels that this crisis of our technical world could be turned only by criticizing it and overthrowing it. For objectivism, the experienced reality of the life-world - as the opposite of the true world of science existing in-itself - counts as a sphere that is merely subjective and relative. There can be no authentic knowledge and no true science of this domain. Husserl criticizes this position in the following way

The contrast between the subjectivity of the life-world and the "objective," the (nature in an expanded sense) "true" world, lies in the fact that the latter is a theoretical-logical substruction, the substruction of something that is not in principle perceivable, in principle not experienceable in its own proper being, whereas the subjective, in the life-world, is distinguishable in all respects by its being actually perceivable.⁹³

Thus, the life-world is, for Husserl, the domain of ultimate evidences of that which is meant to be given in-itself since the essence of induction is the inductivity of something that is intuitable.

Overturning the crisis of objectivation consists in the task of bringing "to recognition the primal validity of these evidences and indeed their higher dignity in the

⁹³ *Crisis*, p. 127.

grounding of knowledge compared to that of the objective-logical evidences."⁹⁴ These evidences, in constant need of revision and verification, do not offer security against error, rather they have a presumptive character. Evidences also point to further evidences and can support or nullify other evidences. Every new means of access points to further ways of determining the object under consideration. That the evidences of phenomenology are able to be critiqued prevents dogmatism from entering this discipline. We can see the necessity of this task by pointing to the simple fact that the ever so complicated theoretical constructions about nature can count as true only when they have been confirmed in experiments. Verification, however means being able to fix the predicted event as one which has taken place in our field of sensuous experience. In this connection Husserl points out that all scientific theory construction requires perception of models.⁹⁵ Models in their verification must be related back to the level of experience and judged accordingly.

From objective-logical evidences we can question back to the primal evidence in which the life-world is pre-given. Experience yields, accordingly, "a self-evidence taking place purely in the life-world and as such is the source of self-evidence for what is established in the sciences, the latter never themselves being experiences of the objective."⁹⁶ Questioning back to the life-world, therefore, means nothing less than the vindication of the domain of belief; for the life-world is considered to be the sphere of

⁹⁴ *Crisis*, p. 128.

⁹⁵ *Crisis*, p. 129.

⁹⁶ *Crisis*, p. 129.

belief (*doxa*) that is scorned by natural science. Husserl grounds the necessity of this return primarily in opposition to what he understands the current mode of thought to be, one that is not too far removed from our own. Noting this gives us a way of seeing the historical and systematic meaning of the problem of the interrelation of the life-world and nature from within the history of the grand march of Western Reason.⁹⁷ And this, with special reference to selected themes of ecology, is the theme of the following chapter.

⁹⁷ See: Milan Kundera, *The Art of the Novel* (New York: Harper & Row Publishers, 1988).

Chapter III

Crisis and Nature

From what has just been said, we can see that Husserl's notion of the life-world is introduced as the domain of primal evidences from which one can proceed to understand the sense of the various other kinds of evidences attained in practical life and in the theoretical activities of the natural sciences. Husserl writes

The life-world is pregiven to us all... as persons within the horizon of our fellow men, i.e., in every actual connection with others, as "the" world common to us all. Thus it is...the constant ground of validity, an ever available source of what is taken for granted, to which we, whether as practical men or scientists, lay claim as a matter of course.⁹⁸

The first step of the phenomenological return to the dimension of the final evidences is the phenomenological reduction, with its bracketing of the general thesis of ontic belief, of the belief in the world as a world persisting in itself. A standpoint which is adopted by the natural sciences where the laws of nature are upheld, while what is governed by these laws slowly becomes extinct. The program of this style of reduction was envisioned early in Husserl's career. Thus, the return to the evidences of the life-world as the theme of constitutive analyses must be understood as the last step in Husserl's concrete explanation of his program of reduction.

The delineation of the life-world is not a novel theme in Husserl's writings. This expression is a label for what Husserl had already spoken of in the *Ideas* as the correlate

⁹⁸ *Crisis*, p. 122.

of the natural attitude, a correlate now taken in its full concretion. The concreteness of the world is traced back to its constitution in transcendental subjectivity. In the *Crisis* the theme of consciousness and world are expressed in their mutual dependence. The world, in its actuality, is not held in abeyance but is explored as the concrete ground of constitutional acts. The foregoing certainty of its givenness is spoken of as the general thesis of the natural attitude, the belief in the world belonging to natural life. It is important to see that the belief in the existence of the world is not merely an epistemological problem, as though one were concerned with the certainty of a being outside us. Rather, this certainty is a certainty which is structured in itself, is filled out and differentiated with regard to its content. The world of the actual life-world is given in such certainty. With the interrogation of the *a priori* of the transcendental-constitutive conditions of its givenness, phenomenology is led back to that residue remaining after the reduction; to deeper constitutional accomplishments of transcendental subjectivity, accomplishments making possible all other accomplishments.

Once Husserl has displayed the origin of not only all scientific but also all philosophical conceptions of being-in-itself, and once we comprehend the truth of this concept as that of a necessary hypothesis of human existence, then we must ask: in what way can the doctrine of primitive evidences, which appear as purely subjective when compared with those of science, become the domain of a philosophical science which is fundamental? As Husserl asks: "Can there be, next to objective truth, yet a second truth, the subjective?"⁹⁹ This would be a science whose exclusive task would be "to

⁹⁹ *Crisis*, p. 175.

comprehend precisely this style, precisely this whole merely subjective and apparently incomprehensible "Heraclitan flux,"¹⁰⁰ that is, to comprehend precisely that domain of belief which, from the beginning of the history of metaphysics, was excluded from the entire range of what could be scientifically known. We must also question how a science of this "flux" can enable one to understand nature in a manner that sheds insight into ecological problems. A theme which I think is implicit in the *Crisis*.

Nature and History

In the *Crisis*, the science of the life-world is introduced as a postulate, as "that novel universal science of subjectivity as pre-giving the world."¹⁰¹ The philosophically fundamental science of the life-world is, therefore, nothing other than transcendental phenomenology itself with the task of describing the world constituting accomplishments of transcendental subjectivity in its fullest sense. With the question of the life-world, the intention leading Husserl from the beginning comes to its fulfilment, and at the same time he is able to give the method of transcendental constitutive disclosure its most poignant formulation.

It is no longer sufficient - and this is a self-referential criticism to the way the phenomenological reduction is introduced by Husserl - just to demand, Husserl remarks,

[T]hat we use no sort of knowledge arising from the sciences as premises, and we take the sciences into consideration only as historical

¹⁰⁰ *Crisis*. p. 177. See also: G.S. Kirk, J.E. Raven & M. Schofield, *The Presocratic Philosophers* (Cambridge: Cambridge University Press, 1983).

¹⁰¹ *Crisis*, p. 177.

facts, taking no position our own on their truth.¹⁰²

This demand already results from the elimination of a world subsisting in itself. The objective sciences and their propositions are not tested as to their truth but rather their origin and existence are comprehended only as cultural facts among others appearing in history. Moreover, Husserl adds to this,

[I]n a certain way, concern with this sort of thing belongs continually to [one style of] objective investigation, mainly that of the historians, who must, after all, reconstruct the changing surrounding life-worlds of the peoples and periods with which they deal...

The same thing holds [even] if we take our subject of investigation, in a unity of a systematic survey, all [historical] periods and peoples and finally the entire spatiotemporal world, paying constant attention to the relativity of the surrounding life-worlds of particular human beings, peoples, and periods as mere matters of fact...It is taken one part at a time and then, at a higher level, one surrounding world, one temporal period, at a time; each particular intuition [yields] an ontic validity, whether in the mode of actuality or possibility. As each intuition occurs, it presupposes others having objective validity--presupposes for us, the observers, the general ground of the validity of the world.¹⁰³

What this means is that a comparative and universal phenomenological analysis can transpire on the ground of the natural attitude. Phenomenology no longer restricts itself from the world in the natural sense. Husserl begins from the natural standpoint but invokes the reduction in order to avoid any naive psychological formulations. Without the reduction phenomenology cannot be a universal epistemology and a first philosophy. What I understand Husserl to be doing is questioning the experiential grounds - in a cultural sense - of how consciousness relates to the world.

The methodological requirements of bracketing the general thesis of the natural

¹⁰² *Crisis*, p. 147.

¹⁰³ *Crisis*, p. 147.

attitude - as it is presented in the exposition of *Ideas I* - take on a deeper meaning when it is contrasted with the comparative cultural-historical considerations of the world in its historical becoming and transformation. Phenomenology's task is not only to show how the consciousness of the world as horizontal consciousness is implicit in our awareness of the world and its contents, but also to show how the world is a historical horizon. This means that it does not merely disengage the ontic positing implicit in our awareness of individual givens (for example, the perception of creatures commonly associated with nature) but it also must thematize each individual ontic positing as a positing transpiring in the horizon of the world as a historical horizon. In each case, the world is implicit not only as the horizon of what is simultaneously present but also as the horizon of what is past. Husserl remarks that

Because of this constantly flowing *horizontal character*, then, every straightforwardly performed validity in natural world-life always presupposes validities extending back, immediately or mediately, into a necessary subsoil of obscure but occasionally available, reactivatable validities, all of which together, including the present acts, make up a single indivisible interrelated complex of life.¹⁰⁴

Thus the horizon of the life-world is the horizon of world history which reveals the constitution of nature, among other things. It is the history of the one world with all of its variations of historical events and records. It is the history of the world that it is valid for us. A world where the events considered by ecology take place and provide the grounds for their theoretical findings. In short, the horizon of the life-world is the horizon of the history of the world.

¹⁰⁴ *Crisis*, p. 149.

Such a formulation is not meant to deny that the life-world is not the world of immediate experience, that what is perceived displays itself, in the structures of spatio-temporality, to transcendental Egos as sensuous, perceiving subjects; that the world of material nature discloses itself for us as nature, before all scientific analyses and objectivation. Rather what this means is that an actual and changing intuition of nature is intertwined with this historical horizon. This perceptual flow of nature, which is always changing and does not match the natural scientist's idea of nature in itself, is the intuition which specifies our conduct and comportment towards nature. As "environing nature" it is, then, not "alien to the spirit,"¹⁰⁵ but rather something that is capable of being understood in idealizations, in view of an idea which serves to direct the projects of our natural life. As such the sphere of nature "presupposes history."¹⁰⁶ The teleology of reason that has already been born in civilization reveals nature as a ready made idea. The awakening of the idea of nature is its rebirth. Phenomenology can therefore have the task of prescribing the development of a *telos* inherent in history.¹⁰⁷

Taking an *eidōs* of nature, over against the flux of its factual and particular realizations, as the abiding and permanent truth is a naivete. And such a case may be the belief in nature's ability to replenish itself. Taking the *a priori* of the modern, natural sciences as unconditionally valid is a naivete precisely because such an attitude freezes and absolutizes what is formed under historical conditions and within historical traditions.

¹⁰⁵ *Crisis*, p. 272.

¹⁰⁶ *Crisis*, p. 323.

¹⁰⁷ *Crisis*, sect. 7.

The immediate experience of nature in its sensuous perception or appearance, and the historically changing intuitions of nature which are formed on the basis of this generate the interrogation of those constituting accomplishments which make possible this growth and change, and, thereby, the history of the transformation of the horizons of the world of material nature. In other words, the life-world is the concrete historical world with its traditions and changing intuitions of nature. The question of the constitution of the life-world, therefore, is conceived, in its fullest range, to be the question of the constitution of the world as historical world.

One may obviously object to the foregoing in the following manner: the life-world is and remains the world of sensuous experience whose correlate is spatio-physical nature. Does not this reduction of nature to a historically changing adumbration of nature, belonging to a historical stage of a particular culture, deny that there is something unalterable in the movement of the historical world? If the images of nature - not only those that are understood by the common person but also those fashioned in science and philosophy - belonging to the horizon of each particular culture, are historically variable, and are only hypotheses necessary for the various tasks of practical life, then there would no longer be any foundations by which we could evaluate their truth. We could no longer say that the interpretations of contemporary natural science are an advance over the formulations laid down by Kepler. Following Husserl, one could say that such pictures are better suited for the task of providing better prospects for meeting the demands of our contemporary existence in the life-world. For, as we have shown, Husserl maintains that all concepts of nature are hypotheses, they have a meaning that is capable of being

modified in the course of further developments. Such concepts can not be construed as descriptions of nature in itself.

Epistemological theory can uncover the conditions for the possibility of objective knowledge, and can make clear the motives guiding a scientific, or clear and distinct, interpretation of the world, but it cannot comprehend the conditions under which the various procedures of the natural sciences are seen as historical constructions and under which science can understand itself in its historical becoming. To this end any epistemological theory must itself become historical interrogation. Obviously, following Husserl, the "historical backward reference has not occurred to anyone; certainly theory of knowledge has never been seen as a peculiarly historical task."¹⁰⁸ Therefore, transcendental phenomenology must have in view "the total problem of the universal historicity of the correlative manners of being of humanity and the cultural world and the *a priori* structure contained in this historicity."¹⁰⁹

But, could not one immediately ask, have not the changes of the historical world swallowed up everything that would be permanent and abiding in an attempt to delineate a concept of nature? Has not this flux thereby denied the possibility of a universal and binding truth which could be seen as such and made intelligent to all? Has not Husserl hampered the project of ecology by thwarting the program of understanding nature by laying claims to its historical variability.

This question places us squarely before the problem of the very method of a

¹⁰⁸ *Crisis*, p. 370.

¹⁰⁹ *Crisis*, p. 369. (italics mine).

phenomenological science of the *a priori* of the life-world. It indicates many of the difficulties that which appear in this problem of method and issues a challenge to find a way leading to its solution. At the same time the question of a phenomenological science of transcendental subjectivity, a science which could provide new foundations for expressing humanity's relation to the sphere of nature, is raised in a new way, a way which transcends Husserl's earlier formulations of nature in both volumes of the *Ideas*.

The A Priori of the Life-World

The task of the phenomenological science of the *a priori* of the life-world can now be formulated in this way: it must make use of the materials offered to it by the empirico-historical sciences of the forms of human cultures, and their interfacing with nature, but it cannot restrict itself to this, as does the historian or ecologist when they research the actual course and changes of history and describe the succession of ever new forms of human culture in terms of similarities and differences. For a description of common structures only attains to the levels of empirical generalities and not to the level which makes history as such and the change of its forms in unqualified universality possible. An ecological analysis which takes its clues from Husserlian phenomenology, therefore, must transcend the configuration of history as a flux, in which there is nothing permanent and abiding, and in which all cultural worlds are life-world horizons relative to those which are currently being lived. It is precisely by a reflection upon the conditions of this relativity, conditions discovered in transcendental subjectivity that an idea of nature can be elucidated, one which shows the importance of a interaction with nature which is

positive. From within this reflection, the objective sciences of material nature, with their claims to truth, are also seen as historically relative constructions and are able to be critiqued as such. It is from this standpoint that an ecological idea of nature may be formulated. Husserl puts it succinctly by noting that

All [merely] factual history remains incomprehensible because, always merely drawing its conclusions naively and straightforwardly from facts, it never makes thematic the general ground of meaning upon which all such conclusions rest, it has never investigated the immense structural *a priori* which is proper to it... This is the concrete historical *a priori* which encompasses everything that exists as historical becoming and having-become or exists in its essential being as tradition and handing down.¹¹⁰

What method can we have for uncovering this *a priori* of history? How could a science of ecology benefit from this phenomenological criticism and discovery? Its uncovering required Husserl to take a step beyond the manner in which he, in his earlier work, had studied the essential correlation between constitutive accomplishments and constituted nature. In his words: "the phenomenology developed at first is merely "static"; its descriptions are analogous to those of natural history, which concern particular types and, at best, arrange them in their systematic order."¹¹¹ Static phenomenology is restricted to a consideration of the correlation of essential forms, ideas of constituted existents, and the constituting accomplishments essentially adjoined to them. The existent which is studied, nature for example, in terms of its essence and differences, is pregiven as an existent appearing on the horizon of the world. In this static differentiation of the existent in terms of its essence neither the horizon of its appearing, the world, nor the

¹¹⁰ *Crisis*, pp. 371 - 372. (italics mine).

¹¹¹ *Cartesian Meditations*, p. 76.

accomplishments constituting this horizon of the world come into view. As Husserl notes

Things, objects...are "given" as being valid for us in each case...but in principle only in such a way that we are conscious of them as things or objects *within the world-horizon*. The world, on the other hand, does not exist as *an* entity, as an object, but exists with such uniqueness that the plural makes no sense when applied to it.¹¹²

If, however, the world-horizon is the horizon of world history as the history of one world, then all static phenomenological analyses and conceptualizations of the correlation between humanity and its interfacing with nature presuppose history and its *a priori*. It is precisely these considerations which generate the question of uncovering a specific *a priori* of history which can be beneficial to ecology.

In order to achieve a reflection which goes beyond the limits of static phenomenology, and advance the idea of nature beyond the formulation provided by the science of material nature, it is necessary that reflecting subjectivity itself transcend the course of history in its search for an *a priori* making its own history possible. Husserl also asks the following:

Does this not then apply to all science, no matter how different its peculiar characteristics may be, and thus to all truth in the scientific sense, as a science's guiding ideal? Does it not derive from an idealization which is itself in the historical sphere, and does it not presuppose the *a priori* of history, which itself derives from an idealization?¹¹³

Husserl hereby pays recognition to the understanding that the surrounding world is prior to the possibility of there being a science, including the science of historical being, and such sciences rest upon an idealization. With this concept of idealization, Husserl

¹¹² *Crisis*, p. 143.

¹¹³ *Crisis*, pp. 350 - 351. (italics mine).

formulates a fundamental problem that concerns an *a priori* of history as well as the science of ecology; though this ecological theme is only implicit in Husserl. What I have in mind is the apparently irreconcilable differences between the Heraclitan flux of this historical world horizon and the concept of the flow of this essence which is an idealization.

Husserl is keenly aware of the antinomies between the two and notes the reconciliation of the two is, in part, the key to the solution of the unfolding of history, that is, the *a priori* of the life-world as historical world. Keeping the empirical sciences of history and ecology in view, we can say that this *a priori* is the set of the conditions for the possibility, not only of a prescientific experience of the life-world in its historical horizon, but also the conditions of the possibility of an empirical science of a historical type. For, as Husserl notes "all questioning and demonstrating which is in the usual sense historical presupposes history as the universal horizon of questioning."¹¹⁴ The question, therefore, is, if ecology bases its finding on history - either partially or fully - then how is it that our life-world has the horizon of history, that it is a historical world displaying the situations that are recorded by ecology?

The manner by which Husserl solves the difficulty, of the historical nature of the world brings us to the question of primal evidences, a question with which we have dealt in our discussion of the originary datum of the experience of nature, which are acquired and explicated in the reduction to transcendental subjectivity as foundation. Thus, the *a priori* of history is not a realm of ideas set off in some closed realm that lies behind the

¹¹⁴ *Crisis*, p. 373.

world, rather the *a priori* of history is discovered in the self-experience of transcendental subjectivity.¹¹⁵

What is the *a priori* of history as experienced in the return to the basic datum of historical evidences? It is, I think, the temporal structure of constituting subjectivity which constitutes itself as temporal, as flux. For Husserl this constitution always proceeds in the living present. He notes

What is historically primary in itself is our present. We always already know of our present world and that we live in it, always surrounded by an openly endless horizon of unknown actualities. This knowing, as horizon-certainty, is not something learned, not knowledge which was once actual and has merely sunk back to become part of the background; the horizon-certainty has to be already there in order to be capable of being laid out thematically; it is already presupposed in order that we can seek to know what we do not know. All not knowing concerns the unknown world, which yet exists in advance for us *as* world, as the horizon of all questions of the present and thus also questions which specifically historical...Accordingly, we need not first enter into some kind of critical discussion of the facts set up by historicism; it is enough that even the claim of their factualness presupposes the historical *a priori* if this claim is to have a meaning.¹¹⁶

This means that the conditions of the possibility of having a world as historical world are found not only in the accomplishments of the perceptual constitution of the world of nature, but also in the temporal constitution of transcendental subjectivity, a constitution in which the living present has its past continually sinking back and its horizon as an open horizon of the future. these are, therefore, the conditions of the possibility of having a world with its traditions, thus a historical world. A world where the acts recorded by

¹¹⁵ Jacques Derrida, *Edmund Husserl's Origin of Geometry: An Introduction* trans. John P. Leavy, Jr. (New York: Nicholas Hays, Ltd., 1978), p. 174.

¹¹⁶ *Crisis*, pp. 373 - 374. (italics mine).

ecology may be phenomenologically understood.

Contained in this primitive evidence of the self-experience of transcendental subjectivity is not only the awareness of the rootedness of itself as flux, but also the evidence of not being anything other than the condition of the possibility of having a world as historical world, so that "every establishment of a historical fact which lays claim to unconditioned objectivity likewise presupposes this invariant or absolute *a priori*."¹¹⁷ With this insight we stand, Husserl maintains, before "the great and profound problem horizon of reason, the same reason that functions in every man, the *animal rationale*".¹¹⁸ This means that the type of culture in which we understand ourselves to be has "a root in the essential structure of what is generally human, through which a teleological reason running throughout all histories announces itself."¹¹⁹ This *a priori* of history is different from the objective logical *a priori* by which history is written as it is, itself historically generated, found on the projects and tasks of life. It is here that ecology can benefit from a relationship with phenomenology. I think it would be most profitable if the problems of ecology could be shown within the concept of life-world since it has an invariant style.

Then, if we grant a teleology to the history of humanity's relation to nature,¹²⁰ to its relation to its environing surrounding world, then to what extent is the flux in its

¹¹⁷ *Crisis*, p. 377. (italics mine).

¹¹⁸ *Crisis*, p. 378.

¹¹⁹ *Crisis*, p. 378.

¹²⁰ Enrico Garulli, "The Crisis of Science as a Crisis of Teleological Reason" in: *Analecta Husserliana*, Vol. IX (Boston: D. Reidel Publishing Company, 1979), p. 100.

necessity not brought to a standstill in the ideas about its flowing but rather grasped as flux? We would have to grant that all conceptions of a historical *a priori* are idealizations. But we can take a clue from the way in which Husserl carries out his analysis. The answer begins with a question of the method used to disclose a historical *a priori*.

This *a priori* can be discovered through a reflection upon the levels of the constituting Ego and its primitive levels as primitive evidences. The Ego reflected upon "cannot be declined" and, in fact, is named I through equivocation.¹²¹ This facet of the Ego, in its constituting accomplishments, is understood, I think, as being beyond the universality acquired through idealization and the individual egos that are subsumed under a universal *a priori*. Such subjectivity, as we have seen, is ultimate and lies apart from the antinomies of the one and the many, as does its correlate, the world being constituted in it. Here, I think we can see, if we follow Husserl, a foundation which can serve as the basis for the articulation of humanity's specific type of involvement with the realm of material nature. This problem, in its singularity, indicates the one world common to all and, thereby, humanity. Subjectivity, therefore, is discovered in the reflections upon its constituting accomplishments. But in what sense has subjectivity discovered itself? And how can this discovery prove beneficial to those who advocate ecological concerns.

The answer which Husserl gives to the first question must be made precise. Husserl points out that the concepts of the invariant structures in all historically changing worlds, concepts which allow us to conceptualize them as worlds which belong to our life-world, as *a priori* conditions of the possibility of having one, derive, as does every

¹²¹ *Crisis*, p. 184.

a priori, from idealization. Thus, reason which discovers this idealization is not defined by a permanent acquisition of a total concept of the world of nature. Rather reason, as we have seen, is understood as intentional reason which, as intention, is always transcending the sensuously given in the move towards idealization. The *a priori* is an invariant, but it is not exhausted by our conceptualization of it; for then it would be brought to a standstill. But because the *a priori* is itself a flux, the reason which conceptualizes it, is subjectivity reflecting itself as reason.

The solution to the problem of the *a priori* of history, it seems to me, implicitly contains a direction with which ecology may take a directive regard. Husserl's concept of intentionality and his establishment of the teleology inherent in history are founded on a primal intention from which follows an intentional forward moving process which reaches out into a still indeterminate horizon, a horizon which is becoming filled out in its becoming. If ecology can grasp and make evident the teleology of humanity, in the complex manner which Husserl describes and offer solutions along phenomenological lines, then this teleology can be directed towards a new horizon of transcendental life.¹²² That is a possibility that can be envisioned and reached for. It is not that this task has not been taken up by ecology, rather, it is the possibility that Husserlian phenomenology offer a both a unique mode of access and scientific rigour for the discussion of such matters.¹²³

¹²² Angela Ales Bello, "Teleology as "The Form of All Forms" and the Inexhaustibility of Research" in: *Analecta Husserliana* Vol. IX (Boston: D. Reidel Publishing Company, 1979), p. 343.

¹²³ Bianca Maria Cuomo D'Ippolito, "The Theory of the Object and the Teleology of History in Edmund Husserl" in: *Analecta Husserliana* Vol. IX (Boston: D.Reidel Publishing Company, 1979), p. 273.

If the phenomenological reduction eliminates the natural scientific interpretation of the essence of nature then it brackets certain possibilities which have, from ecology's viewpoint, plagued the understanding of nature. Likewise it eliminates the problem of the mediation between the transcendency of material nature and its constitution in factual transcendental subjectivity. What is required is a marriage between ecology's account of humanity's involvement with nature - the historical *a priori* which humanity is destined - and the phenomenological discourse which can articulate such matters. Phenomenological reason is not circumscribed by a fixed *a priori* but is open reason. It does not, therefore comprehend itself and its ground theoretically, rather its possibilities become possibilities by taking them up as projects of the will, that is, by assimilation and realization, and thus, by carrying out our freedom. Such a possibility exists for the merger of ecology and phenomenology. It is in the actual carrying out of its freedom that transcendental subjectivity comes to know that which grounds and makes possible the style of its life. With ecological findings, the *a priori* possibilities of a teleological movement are not possibilities in themselves but ones that become transparent by way of the basic evidences of transcendental subjectivity.

Summary and Transition

Husserl's articulation of the life-world as the domain of primal evidences has been indicated with emphasis placed on the role of the life-world for an understanding of history. The phenomenological investigations into this Heraclitan flux of history were elucidated so that history could be understood as an accomplishment of world constituting

subjectivity. The level of analysis made possible by the phenomenological reduction was argued to be beneficial to a science of ecology. With the historical comprehension of the concept of nature, presented in the *Ideas*, the possibility of discovering a historical *a priori* that is beneficial to ecology is seen as a real possibility. The task, it seems, for ecology - a task which is mapped out by Husserl - is to examine the historical *a priori* of the life-world which has constituted nature in a manner that is proving harmful to nature fully conceived. The benefit of phenomenology is that it allows for a rigorous discussion of nature at a discursive level that is distinct from, yet intertwined with, natural science. Phenomenology, it has been argued, also opens up nature to a historical understanding that is not possible in the empirical sciences.

Phenomenology demonstrates a unique way of comprehending the radical difference between the sphere of subjectivity, in its Heraclitan flux, and the conceptual framework of idealizations that are employed in the constitution of nature. The possibility of a historical understanding of scientific concepts would, in the case of ecology, allow them to be understood as cultural accomplishments. Phenomenology with its open horizon of reason could also provide a path for a different understanding of nature.

The guarantee which secures these possibilities as kinds of constitutional accomplishments and yet leaves room for freedom is Husserl's notion of reason. This reason is experienced only in the execution of reason and cannot be theoretically conceptualized apart from freedom. Therefore, there is an interrelationship between the fact that the freedom to discover a new mode of interfacing with nature cannot be known only theoretically and the fact that the *a priori* of the life-world cannot be objectified and

idealized, that is, the *a priori* as a structural style of the transformations of the horizon of nature must be understood as an indeterminate openness in which constituting subjectivity factually finds itself.

In this analysis of the essence of intentionality, we find the key to overcoming the opposition between the *a priori* of history and what is empirical. The universal structure of subjectivity constituting the life-world, its intentionality, is intentionality in the sense of transcendence, a reaching out beyond itself in horizons of open possibilities. If, Husserl has identified the crisis of the life-world in a manner which has relevance for those concerned with ecological issues, then what remains to be shown is Husserl's own directions that he envisioned for humanity's historical destining. Once problems have been identified, we must inquire into their solutions. And this is the theme of the final chapter.

Chapter IV

Husserl's New Horizons

Considerations of the direction which ecology can take can be found in Husserl's concise article, "Renewal: Its Problem and Method". The importance of this terse essay is its demonstration of the need for an *a priori* science (phenomenological science), and how it shows how the values of a specific culture can be renewed and set forth on the path towards a genuine humanity, an authentic phenomenological humanity.¹²⁴ That is, phenomenology must search for the formal structures that are present in cultures. These structures, I think, are based on the subjective *a priori* of experience that has been described, for instance.¹²⁵ Husserl here is again forging new directions for his phenomenological method.

His concern, as I understand it, is the development of a novel method of inquiry that is appropriate for the interpretation of cultural accomplishments - such as those that ecology has recorded - and for the transvaluation of values. The difficulty which Husserl recognizes is the part of the crisis of contemporary culture which consists in being lost in the political and social world, that is, in accepting what has been given as self-evident.

¹²⁴ The change of investigative regard by Husserl should be noted here. In *Ideas I* Husserl claims that "state, custom, law and religion" are "bracketed out" by the reduction. See: *Ideas I*, pp. 131 and 133 - 134. Now these domains are to be phenomenologically investigated by Husserl. This illustrates how Husserl moves from the ego solitaire to an ego founded in a world of others.

¹²⁵ Andre de Muralt, *The Idea of Phenomenology: Husserlian Exemplarism* trans. Garry L. Breckon (Evanston: Northwestern University Press, 1974), p. 227.

Husserl recognizes that, in part, formulating solutions to the problems of humanity in the same sedimented concepts and language is part of the problem. Phenomenological reduction is required not because there is a lack of interest in the social and political world, but rather because Husserl wants to approach these phenomena in an unhindered way. In short, Husserl is concerned with the phenomenological uncovering the foundations for the study of contemporary culture.

Husserl's "Renewal: Its Problem and Method" is directed towards the very issue of, broadly speaking, ethical renewal. Why then, we may ask, is a renewal of the ethical sphere necessary. How is it that a renewed rational science, that is, a renewed philosophy, can bring about comprehensive political and social change? To understand the information supplied by ecology is to see the necessity for a reformulation of how our modern culture interfaces with nature. Husserl is a great upholder of the division of the sciences, each phenomenological science would be occupied with a particular region of being. Hence, each phenomenologist, in the effort of renewal, would direct his/her efforts to a specific realm of phenomena; be it humanity's relation to material nature or other realms. What Husserl means by renewal is phenomenological culture. The agents for this renewal are those who have not lost sight of the goal of rational life, of philosophy as humankind's highest goal. But any individual efforts are not sufficient to renew culture.¹²⁶ It is possible only as a shared effort.

Any discussion of the political and the social involves two distinct but connected relationships: subject to subject relations and subject to community relations. Neither of

¹²⁶ Husserl, *Heidegger, and the Crisis of Philosophical Responsibility*, p. 116.

these relations is without difficulty for Husserl.¹²⁷ Husserl's elaboration of the ego is the ego as self-sufficient. On the other hand the ego experiences empathic relations with other egos. The subjective life of the ego is the ego's alone. Part of this self-contained experience is the awareness of other subjects. In the "Renewal" article, the possibility of inter-subjective experience is assumed and the emphasis is on the relationship of the individual and community.

The foundation for such a renewal has its own rational structure, one that is in keeping with the scientific rigour of Husserlian phenomenology as it has been presented so far. What is essential for cultural renewal is the development of an *a priori* science of the transcendental Ego and their place in a community of others. The level of this study is founded on the individual ego's relation to others. The necessity of the *a prioris* is not determined in advance, rather they are revealed teleologically. It is a teleological science of history which determines the *a priori* laws that are present in historical community and phenomenological philosophers must find their place in a community that is considered authentic. It is a community where insights are discovered by individuals and shared in common. And if the *Crisis* is written as a response to the deunification of philosophy then the community that Husserl envisages is one in which the development of universal reason is such that it precludes the possibility of unsolvable conflict. This forms the basis for an authentic community where phenomenology can be developed. A community that is struggling to create a unified science that is founded on the rationality systematized by

¹²⁷ Forrest Williams, "Intersubjectivity. A Brief Guide" in J N. Mohanty and William R. McKenna eds. *Husserl's Phenomenology: A Textbook* (Washington: University Press of America, 1989), pp.309 - 344.

the Greeks. This is a historical fact to which Husserl wants science to return.

Arising from such a science is a scientifically constituted nexus of *a priori* laws that are founded in the interrelationship of the individual and community. At the level of community phenomenology can look back historically and elaborate how, by necessity, a culture has been transformed. Every cultural present and every scientific present implicates the totality of its past. The unity of this present leads us to *a priori* laws that account for cultural, in its highest sense, transformations.¹²⁸ Husserl also states that the type of laws revealed by this interrelatedness must serve as the ground which makes possible the explanation of cultural states of affairs. In its highest form, this method is to be developed in such a manner as to direct all aspects of praxis in the contingent domain of present day culture since it is the history of the totality of individual egos. Not content to remain on the level of mere description, Husserlian phenomenology now takes up the task of guiding humanity in its search for new ideals. Let us examine this matter and show how it meets some of the concerns expressed in this thesis.

Husserl's primary concern here is the questioning of how cultures may renew their faith in the guiding ideals that originally gave rise to the specific form that a culture embodies. Husserl's questioning is one that is not unfamiliar to those that advocate the preservation of cultural habitualities that define a culture's greatness when they are viewed to be in decline. And the crisis that Husserl describes allows for the articulation of a solution, phenomenological solution. Given that a culture has been weakened Husserl asks what steps may be taken in order to secure its rejuvenation. He notes

¹²⁸ *Edmund Husserl's Origin of Geometry: An Introduction*, p. 109.

Something new must happen. It must take place *within* us and be carried out by us, as members of humanity who live in the world and being formed by it. Shall we wait to see whether this culture will recover itself, in the chance play of forces which create and destroy values?¹²⁹

Husserl maintains that we can only accept the decline of a specific culture as fate only if we stand passively on the sidelines and accept the decline of culture as the only path that history can unravel for us.

Or, as Husserl suggests, we as the bearers of this humanity can, as free-willing subjects, take up the task of acting rationally. It is a task that is within our freedom or power. The task of phenomenology is to call attention to the loss of faith in rationality by exposing the need for a proper science of rationality. Of course, Husserl recognizes that both skeptics and cynics alike will scoff at such lofty goals, even on the personal level and thereby deny this as a task that can be taken up at the community level. That is, there will be those who will want to deny ethical progresses that are guided by rational ideals. But Husserl will not allow such bearers of such false news any credence. The task of philosophers is to propagate the spirit of reason for others. They must not see for others but bring them to see. In short, we must all take up the tasks of phenomenology.

He argues

Not allowing ourselves to be led astray by a feeble pessimism and a "realism" without ideals, we shall not unquestioningly consider such progress to be impossible, even for "man writ large," for larger and even the largest communities. We shall have to recognize, an absolute ethical demand, the similar posture which struggles for a better humanity and a genuine humane culture.

¹²⁹ Edmund Husserl, "Renewal: Its Problem and Method" in Peter McCormick & Frederick A. Elliston eds., *Husserl: Shorter Works* (Notre Dame: The University of Notre Dame Press, 1981), p. 326. Hereafter cited as "Renewal".

How is it possible for phenomenology to reshape community life, national life, and all of Western humanity? How can this rigorous demand be established as more than a mere claim? Similarly, how can such a position be advantageous to ecology?

Located in a third space between the interactions of the individual and community in which it dwells, phenomenology tries to secure a place for the renewal of cultures and strives to go beyond decisions based on the passions of the will. Husserl admits that this is the foundation for all political acts, based on the art of political sophistry, but it cannot serve as the foundation for the rational renewal of culture. Husserl is trying to give clarity to the idea that this faith is sufficient to begin the task of renewal but this faith must be transformed by reason and elaborated upon in the discourse of rational ideas. That is, this primal recognition must be brought to fruition through the fulfilment of the phenomenological clarification of humanity's guiding ideals. It is this faith in the experience of truth that can promote renewal and provide the norms for the development of phenomenology as a science.¹³⁰ Here Husserl means that something perceived, remembered, strove for, valued, etc. It is something objective which is intended in experience and qualified as the claims made about it are revised.¹³¹

Faith is the foundation for a rationally elaborated process of cultural renewal,¹³² but Husserl also admits that there is no pre-established method to bring about a

¹³⁰ Elisabeth Stroker, "Husserl's Principle of Evidenz: The Significance and Limitations of a Methodological Norm of Phenomenology as a Science" trans. Robert Pettit. p. 113. Translated from "Husserl's Evidenzprinzip. Sinn und Grenzen einer methodischen Norm der Phanomenologie als Wissenschaft," *Zeitschrift für philosophische Forschung* 32,1 (1978): 3-30. Hereafter cited as "Husserl's Principle of Evidenz".

¹³¹ "Husserl's Principle of Evidenz," p. 116.

¹³² "Renewal," p. 327.

reformulation of cultural values. He provides the following insight

The sceptical pessimism and the shamelessness of the political sophistry which so ominously dominates our age, and which only uses socioethical argumentation as a disguise for the egotistical goals of an utterly degenerate nationalism, would not be possible at all if the community's concepts, which have arisen naturally, were not, despite their naturalness, afflicted with dark and unclear horizons and with intricate and hidden implications whose clarification lies completely beyond the powers of untrained thinking. Only rigorous science can provide us with reliable methods and sound results.¹³³

As with each of his demands, Husserl insists that only a rigorous science can provide the means for achieving sound results by way of reliable methods. Only in this way can there be hope for cultural renewal. But of what form shall this saving science be? It must be of a scientific type based on methods of procedure that are self-evident, that is procedures that cannot be otherwise while the realm of objectivities remains relative to the modes of consciousness which apprehends it. And what, if anything, is wrong with the current sciences that find their application in cultural affairs?

It is precisely the relativity of the material world which sets it up as problematic with respect to Husserl's principle of evidence. Consciousness, and its correlate of objectivity, allows for the experience of the world to stand as the source of evidence. What one is concerned with is whether or not a particular state of affairs happens to be so.¹³⁴ Evidence is judged as a mode of experience. And it is consciousness which brings evidence to objective structures. Thus, a science of phenomenology is faced with the task of bringing to awareness the different modes of givenness of what is under consideration.

¹³³ "Renewal," p. 327.

¹³⁴ "Husserl's Principle of Evidenz," p. 121.

Husserl also admits that we are on the path of bringing such a science to maturation but we remain at the level of beginnings.

As one can well understand, Husserl admits that there is no shortage of sciences that are based on the model of exact science. He admits that "we have that greatly admired applied science of nature which has given our modern civilization its powerful superiority, and...much lamented disadvantages."¹³⁵ Despite the many trials of science, Husserl believes that the model of science must become a model for practical action. Yet at the same point Husserl admits that this science is yet to be developed. It is to be a science of the "understanding of the sense of statements about "being," "being given," "being true," and also being "evident," which is active everywhere..."¹³⁶ As is the case with phenomenology encompassing the whole of the natural sciences, so must it encompass the whole of the human sciences as well. What of the already existing sciences of humanity?

Husserl disregards these sciences since, for him, empirical sciences do not display a rational unity of principles. Husserl maintains that we lack an *a priori* science similar to the one included in the science of material reality. We lack the "*mathesis of spirit and humanity*".¹³⁷ What this means is that a rational response to the problem of renewal necessitates the development of a pure method that could rationally explain empirical facts. Empirical facts are not to be explained in the same way the natural world is

¹³⁵ "Renewal," p. 327.

¹³⁶ "Husserl's Principle of Evidenz," p. 121.

¹³⁷ "Renewal," p. 328.

accounted for. Sciences of the empirical sort cannot account for the givenness of the world. Philosophy as phenomenology can be a science of absolute foundations by pursuing the claim to grounds and developing itself rationally.¹³⁸ What we have, Husserl insists, is the rationalization of how the

[E]mpirical domain appears: the normative *judgement according to universal norms*, which belong to the a priori essence of "rational" humanity, and the *guidance* of actual practical activity according to the very norms to which the rational norms of practical guidance also belong.¹³⁹

The application of phenomenology to the realm of spirituality is different from the interrogation of nature that we have witnessed. Nature, as we have seen, is factual existence presented in external perception. And as Husserl has shown, the *a priori* of nature is the rationalization of the essential laws of spatiotemporal forms which builds an exact lawful order of this spatiotemporal realm. The form of the spiritual is radically different. It is distinguished by its very inwardness; a self-contained nature which is akin to the transcendental acts of the Ego that have been examined with respect to the constitution of nature.

In the realm of the spiritual, what must be examined is the sociality of the Ego in its community. That is, one must examine how social acts give a form of unity to the social world and how these acts are accomplished through "intersubjective acts and motivations."¹⁴⁰ Husserl admits also that these acts can be distinguished on the grounds

¹³⁸ "Husserl's Principle of Evidenz," pp. 123 - 124.

¹³⁹ "Renewal," p. 328.

¹⁴⁰ "Renewal," p. 329.

of rationality. By paying attention to the acts themselves, they form the basis for judgements about their efficacy. As part of the task of renewal phenomenology, in its elaboration, can describe how to live rationally. These descriptions are not based on empty norms, rather they are discerned through the examination of factual states of affairs that occur within the context of egological history.¹⁴¹ A rational life is the taking of responsibility for all positions on the basis of phenomenological reason.¹⁴² The explanation of any such acts and motivations cannot be carried out on the same grounds as the application of inductive generalities to material nature.

The interpretation of the spiritual world cannot be done with explanatory theories, the spiritual is more than a matter of fact. Rather, in the examination of the spiritual, there exists the possibility of levelling criticisms against the socioethical realm in accordance with *a priori* norms of reason. And thus we can see the importance of the phenomenologically derived *a priori* norms of practical reason when we consider that their establishment will form the basis for the guidance of humanity in its quest for renewal. These norms are constituted in intersubjectivity. According to Husserl, the being of the world, in its fullest concretion, is being for the subject and the constitution of the world is identical with the essence of the thing. The norms of reason refer to a measure which is no longer approximate but represent an absolute. As soon as we bring up the notion of a measure we discover the relation between the material world and its

¹⁴¹ Edmund Husserl, *Phenomenology and the Crisis of Philosophy*, trans. Quentin Lauer (Evanston: Harper Touchbooks, 1965), pp. 156 - 157.

¹⁴² Husserl, *Heidegger and the Crisis of Philosophical Responsibility*, p. 121. And *Crisis*, p. 18.

eidos.¹⁴³ This is one of the tasks that ecology, established along phenomenological lines, could establish for itself since Husserl claims that the empirical sciences of culture are inadequate.

According to Husserl, the empirical sciences of humankind cannot provide what is necessary for the renewal of the spiritual realm. Husserl stresses this in the *Crisis*, we have seen, when he speaks of the loss of meaning that the sciences have for humanity. Husserl demands that we need the "a priori science of the essence of human spirituality"¹⁴⁴ in order that the task of renewal may be undertaken. What this science must make evident is how it is possible to have a science of the objective spirit itself and what is *a priori* are the intentional structures of experience that are the transcendental conditions which make experience meaningful. It is a question of how the evidence of sense for the ego can become objective and intersubjective.¹⁴⁵ Phenomenology becomes the possibility of investigating the constitutive transformation of the sense world into a world of idealities.

If the empirical sciences of humanity have been set aside for the purposes of renewal, then what becomes of the relation of ecology to phenomenology that we have tried so hard to establish? Husserl admits that the sciences of the empirical types can serve as clues to the problematics of spirituality, but he appears to dissolve the relation between the two. Yet, this dissolution appears only on the surface. Husserl's goal is the

¹⁴³ *The Idea of Phenomenology: Husserlian Exemplarism*, pp. 34 - 35, & 97 - 98.

¹⁴⁴ "Renewal," p. 329.

¹⁴⁵ *Edmund Husserl's Origin of Geometry: An Introduction*, pp. 63 - 64.

subjection of the facts revealed by the sciences of the empirical type to an evaluation by reason. As such, the bond between ecology and phenomenology is strengthened, not weakened. Let me explain.

By themselves, the empirical sciences cannot grasp the fundamental questions of practical reason. That is, they cannot develop an essential science of humanity. But nowhere does Husserl rule out the possibility of a science of the empirical sort being transformed to include these tasks in their projects. Basically, I can see no negative reasons for an equal merger between phenomenology and ecology. Both may be able to further the goals of the other discipline and eventually become a unified science, as would all sciences, based on phenomenological foundations. By a methodic constructive process, a science of human culture can be constructed. How can ecology be aligned with this science?

Ecology subjects humanity, in its various levels of manifestation, to a critique and in some cases a judgement of condemnation. The motivation for this critique is the belief that humanity's interrelation with the world of material reality can be shown other directions. In Husserl's case, the breakdown of the previous way of philosophising reveals the need for a new way of practicing philosophy: phenomenology. Husserlian phenomenology tries to show that its contemporary philosophy had broken down so that it may demonstrate the need for transcendental phenomenology. This is an ideal possibility. Concerning the phenomenological possibility of envisioning such a science of humanity Husserl writes:

If we are not embarking on some utopian fantasy, but rather are aiming at sober, objective truth, then our sketch of this idea must take the form of

a purely conceptual determination of essences; in the same way, the possibilities for actualizing this idea should first be considered in strict scientific rigor *a priori* as pure possibilities of these essences.¹⁴⁶

The task of realizing this essence of genuine humanity lies in the elaboration of justified normative forms. These norms would be established by questioning back from the facticity of societal life to the essence of community. To achieve this, one would have to construct the science of eidetic analyses which are directed towards establishing the idea of a genuine rational humanity. I imagine this would include various investigations into the manner by which humanity interfaces with its surrounding world. But what shall we, who are concerned with the ecological situation of the world do?

Since we must admit, with Husserl, that a science of the essential forms of the spiritual realm is incomplete, then what are the necessary steps to take for the transformation of this possibility to actuality. Clearly we are concerned with temporal infinity, the future of humankind, and the birth of true humanity. What has been established here is a way of investigating how the life-world gives rise to idealizations and how, vis-a-vis the phenomenological reduction and analyses, the original meanings of the life-world are open up to reactivation. It is the task of phenomenology to bring these original meanings to the fore. Also, we must follow Husserl and see that the establishment of such a science is our duty.¹⁴⁷ In short, if the collaboration of ecology and phenomenology is to take place then earnestly must we begin with preliminary methodological considerations which reveal how the realm of material nature has become

¹⁴⁶ "Renewal," p. 330. (*italics mine*).

¹⁴⁷ "Renewal," p. 331. And *Crisis*, pp. 11, 14, 18.

idealized to the extent that we follow idealizations before we actually examine the world in its facticity. I think that the findings of ecology can serve as guiding thoughts for this task. But as we have seen the phenomenological orientation of such a science necessarily entails the phenomenological conversion of empirical descriptions into phenomenological data.

The considerations with which we have concerned ourselves have revealed a rich and fertile ground for analyses of various sorts. That we must focus on essential reflections that can open up the way to a rational science of humanity is the path to renewal. Clearly this claim must be elaborated, but it lies outside the scope of this thesis. My hope has been to pave the way, and show the possibility for an ecological - phenomenological science of humanity's involvement with nature. It is hoped that we have seen the inception of this task. These remarks are only to show the infinite tasks that lie ahead for those concerned with the rigorous foundations of ecological findings in their diverse manifestations.

Chapter V

Conclusion

The overall aim of this thesis has been the investigation of Edmund Husserl's conception of nature and the possible alignment of ecology with phenomenology. This thesis presupposed that Husserlian phenomenology is a viable way of practicing the art of philosophy. By focusing on Edmund Husserl's description of nature from the Cartesian standpoint of phenomenology we entered into considerations of how the world that is understood from the natural standpoint could be phenomenologically accounted for. And throughout I stressed how this could be of advantage to the science of ecology. Yet this thesis did not assume that a place for ecology existed in phenomenology. Husserl's reflections on the idea of nature and the crisis of humanity demonstrates that a return to phenomenological investigations opens up the way for a series of considerations on the relation of humanity to its non-human world.

The aim of this present thesis has been twofold. First, my intention has been to sketch out Husserl's conception of nature vis-a-vis an elaboration of his phenomenology of the Ego understood as the Cartesian *cogito*. Second, this thesis tried to sketch an affinity between phenomenology and ecology by showing what I think to be their common subject matter. Admittedly a precise characterization of ecology has been omitted since such a formulation lies outside the scope of this thesis.

Regarding this presentation of this thesis' aim I shall now summarize how this

thesis has completed the tasks which it set for itself.

Beginning from the presupposition that a merger between phenomenology and ecology is possible the first chapter of this thesis sought to clarify the status of phenomenology from the Husserlian perspective on the Cartesian *cogito*. The purpose of this approach was to introduce the Husserlian thematic of how consciousness is consciousness of something since this is a key feature of the perception of the world of material reality. The conclusion of this investigation focused on the explication of the features of the Ego's intentional grasping of material nature.

Methodological clarifications revealed that at certain stages we are unable to speak of nature as a requirement of the effecting of the reduction. Yet it also showed the shortcomings that Husserl saw as affecting the natural sciences. The aim of such a disclosure allowed for a novel presentation of nature in Chapter II. This, I maintain, can be beneficial for ecology since it presents a legitimate ground for discursive activities about nature.

The consequent shortcomings in natural science that Husserl noted led us to see how Husserl saw this situation as a space for phenomenological investigations into the mathematization of nature and thereby introducing the themes of ego and community and the historical dimension of the conceptual systems that are attached to nature. The upshot of this is Husserl's recognition of the crisis that the mathematization of nature has perpetuated. This, I understand Husserl to be saying, is made possible only by reflecting on the life-world structures.

Finally we looked at a possible solution to the crisis that Husserl saw. The goal

of phenomenology is infinite and I have merely sketched on of its tasks though it is a formidable one at that. But I think it is one that remains achievable.

We have seen that there are a number of reasons for viewing a merger between ecology and Husserlian phenomenology as a positive match. The attention that ecology has brought, and continues to bring, to a particular style of humanity's interfacing with nature makes the call for a re-evaluation of the concept of nature all the more timely. The attraction of a phenomenological interpretation of the concept of nature that we, for the most part, employ is its revealing the diverse conceptualizations that are taken for granted when we speak of nature.

Ecology has been trying to unmask the one sidedness and hidden assumptions that arise when the realm of values is excluded from considerations about nature and nature is understood as the domain governed by ideal laws of science. Husserlian phenomenology, as it has been presented, has sought to clarify the consequences of such a position. Ecology has been arguing that the scientific hypotheses about the status of nature, the grand theories about the inexhaustibility of nature's reserves, the capacity of the natural scientific method to comprehend nature in its fullest manner, have lead to the transformation of the envioning world in a negative manner. The occlusion of subjectivity from the understanding of nature is an exemplary case of humanity's turn from the sphere of nature to the position of master and proprietor of the universe.

The emergence of phenomenology marks a rigorous critique of the ideals of the natural scientific way of thinking. Husserl, I believe, strove to uncover the ambiguities and the contradictions involved in the very method of natural science and develop

philosophy as a unitary foundation for the new Atlantis that would arise from the capitulation of many of our scientific practices.

For this reason phenomenology offers ecology a way of engaging in a debate over the future of the world we inhabit, and it provides a discursive space that matches the rigour demanded by natural science but tackles the issues differently. Scientific discourse about nature need not be restricted to the natural sciences alone.

The thesis I am defending is that the conjoining of ecology to phenomenology is propitious to ecology. I think those who pursue ecological concerns can pursue these interests in affiliation with phenomenology and develop further these themes which are implicit in Husserl. Ecology is committed to more than a mere description of the acts of humanity and the alteration of the realm of material nature. I am not suggesting that the adoption of the solutions put forth by ecology will create a utopian world but it may show the way for a better understanding of what nature is. It also envisions a change, and this aspect of ecology can benefit from Husserl's insights. The proliferation of perspectives for change and the multiple alternatives that exist demand that these notions be subject to a rigorous phenomenological interpretation as to their content.

On the more philosophical side, the challenge that ecology is faced with is the epistemological position of their assertions. The claims of ecology can be associated with phenomenology with the resultant disclosure of the historical character of the claims made about material reality. If Husserl is correct in his claims about the vast areas of research opened up by the pursuit of historical *a priori*, and how this method opens up scientific concepts to historical interrogations, then ecology cannot ignore this possibility.

The turn, however, to phenomenology to further and strengthen the critique of humanity's involvement with its surrounding world is a difficult one for ecology. Ecology, as I understand it, encompasses a variety of perspectives that appear legitimate in the concerns that are advanced. If all accounts from diverse perspectives are valid then phenomenology must be evoked so that a sound scientific basis for the articulation of these claims can be established. Such a project would ultimately involve the collaboration of many researchers working in unison towards a common goal established along phenomenological insights. Together, ecology and phenomenology may enunciate goals that are beneficial to material reality and humanity which relies on nature for its very existence.

Finally, I believe that if ecology can follow the unique methodological demands that phenomenology necessitates then ecology can stand with phenomenology as a science which stands above the confusion of relativism and establish goals for humanity so that its historical accomplishments may continue.

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