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The Challenge of Sustainability
in a Postmodern World

The children know. They have always known. The children see.
—Maurice Sendak

To describe childhood simply as the age of innocence is to delude ourselves. Unencumbered by customs and social artifice, the vision of the child is ingenuous but not unenlightened. Often, the child's experience is a disclosure of the world in its primary and immediate givenness. The tedium of replicated experiences is yet to accumulate. In its place, life still resonates with the grace of originary revelation. When Plato tells us that philosophy begins with wonder, perhaps it is this very resonance that he recalls.[1] Certainly, Nietzsche will reflect that the child is "innocence and forgetfulness, a new beginning, a sport, a self-propelling wheel, a first motion, a sacred Yes."[2] In the place of lofty speculation and theoretical constructs, the task for philosophy may be simply *to see* the world more originatively than we normally do.

What might one accomplish with such childlike reverence? To paraphrase philosopher Martin Heidegger, perhaps the question concerns not what *we do* with such seeing but, rather, what might such seeing *do with us*?[3] Today, the eyes of our children gaze upon a world where they no longer play unprotected from the sun. Asthmatic inhalers clear the air for our daughters and sons, and for an increasing number of their friends. Favorite swimming holes—brooks, streams, and lakes— now store our wastes. Environmental degradation no longer remains a mere slogan of green fundamentalists, but envelops our children worldwide.

In this epoch, where environmental concerns bring together world leaders for global summits and where recycling becomes a natural part of our lives, we hear more and more how "sustainable development" policies will help to assure our children a healthier world. The concept of sustainable development alerts us to the dangers of focusing shortsightedly upon gratification of our present needs at

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any cost. Defined by the World Commission on Environment and Development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs," the notion of sustainability implies a long-term moral imperative to attend with greater care and insight to the preservation of our natural and built worlds.[4] At the 1992 United Nations Conference on Environment and Development, representatives of the global community met in Rio de Janeiro to publicly express their commitment to precisely this goal of sustainable development.

Though diverse in form, the aspirations of those who seek sustainable development are often noble ones. On the other hand, too rarely are popular conceptions founded in a reverent, philosophical vision of existential wonder. More typically, a false security arises through piecemeal quantification that seeks the calculation of equilibrium in place of harmony and balance. Costs and benefits become exclusive measures of equity and justice. Environmental management techniques seek quick-fix solutions rather than the wisdom of long-term care. No longer is there talk of persons but of human "resources."

It is time, in my view, to stop and rethink some common paradigms of sustainable development. A first step is to stretch our imaginations beyond the comfort of unquestioned assumptions and to critically analyze them from new vantage points. I recall a game from my own childhood, where I would dream of what it would be like to live in an overturned world. My soul wandered on the ceilings, balancing on chandeliers. I reeled along sloping rafters and stepped over the tops of door frames between rooms. Where in this vast inverted universe I might end up by stepping out of the front door—this question was too incredible to conceive. When I encountered the Hegelian image of philosophy as the world stood on its head, these memories returned to me.[5] Taken-for-granted worlds only become evident when exposed from alternate perspectives.

This book aims to overturn taken-for-granted assumptions of sustainable development so that we might more genuinely respond to unlimited needs within the reality of finite constraints. This latter notion of constraints is troublesome to many of us. Recounting a final childhood memory takes me back to New Year's Day, 1960, when I was only seven years old and I recognized, in that first experience of the dawn of a different decade, that time was passing. A sudden weight descended upon my youth as I saw that my being in the world was not forever. Time was not an eternal resource to be thoughtlessly squandered. My world was not to be taken for granted. I knew then that life had some inviolable limits.

The aftermath of such a recognition was not a morbid gazing at the end but, rather, a renewed appreciation of the gift of life. If the concept of sustainability may sensitize us to an awareness of some limitations, the challenge will be to pursue development with increased humility and respect of our planet. The Chinese proverb tells us that with every crisis comes an opportunity. Increasingly, we accept

that the environment is in a state of crisis. At the same time, the concept of sustainable development holds the promise of new opportunities for learning and for change. This book is one attempt to build upon this promise, for the benefit of our own children, as well as for generations to come.

Philosophy and Sustainable Development

Since the publication of *Our Common Future* in 1987 by the World Commission on Environment and Development (WCED), the term "sustainable development" has come to have a central place in environmental policy-making."[6] The concept has found support from both environmentalists as well as economists and public policy makers who hope that human needs can somehow be met indefinitely into the future, with minimal negative impact upon the natural world.[7] In the words of the WCED, sustainable development "requires the promotion of values that encourage consumption standards that are within the bounds of the ecologically possible and to which all can reasonably aspire."[8]

There are some individuals who see the notion of sustainability as signifying an original and fundamentally innovative direction in environmental thought. Dr. George E. Connell, chair of the National Round Table on the Environment and the Economy in Canada, wrote a letter recently to the Prime Minister in which he stated that "there is no question that sustainable development requires new models of decision-making, new systems of measurement and assessment."[9] Similarly, Ranjit Kumar, Edward Manning, and Barbara Murck of the Centre for a Sustainable Future in Toronto maintain that with a new era of sustainability, "a new world order is emerging, just as revolutionary as that following the Industrial Revolution or the Social Revolution of the last century."[10]

On the other hand, other commentators trace the spirit of the concept at least as far back as the ancient Greeks. Learning from Aristotle, Herman Daly and John Cobb define *oikonomia*, the root of economics, as "the management of a household so as to increase its value to all members of the household over the long run."[11] They contrast *oikonomia* with *chrematistics*, "the manipulation of property and wealth so as to maximize short term monetary exchange value to the owner."[12] Old or new, the concept of sustainable development as "positive socioeconomic change that does not undermine the ecological and social systems upon which communities are dependent" today has prominent influence over environmental and development policy.[13] Moreover, while the concept of environmental care may be as old as civilization itself, it is clear that modern technological society places new demands upon us—demands that will require new ways of interpreting our changing world.

To be sure, mechanisms for implementing sustainability, as well as physical design parameters of sustainable communities, remain elusive. This fact in itself,

however, may not be as problematic as it appears at first glance. One might persuasively argue that it is a dangerous illusion to assume that we can provide an exact, technically complete roadmap on our way to achieving sustainability. Rajni Kothari points to the hazards of reducing environmentalism to a technological fix. He laments the fact that, once again, "manager technocrats" are charged with developing technical solutions: "Economic growth, propelled by intensive technology and fuelled by an excessive exploitation of nature, was once viewed as a major factor in environmental degradation." Ironically, that same paradigm of economic growth and technological progress "has suddenly been given the central role in solving the environmental crisis."[14]

Kothari distinguishes between sustainable development as a "narrow economic ideal" and as an "ethical ideal," arguing that environmental jargon often serves as a cover for the very sort of economic activity that caused environmental destruction in the first place.[15] It is only in a rethinking of our value systems and ethical paradigms that there is some hope for moving toward sustainable development that is also just on an economic, social, and political level. Economist William Rees echoes this sentiment when he writes that

> [planners] will acquire maximum leverage by shifting the focus of their efforts from changing the environment to changing human minds and redesigning social institutions. For sustainable development . . . *the need is more for appropriate philosophy than for appropriate technology.*[16]

To examine the philosophical foundations of sustainability is no small task. On the other hand, in the absence of philosophical enquiry, many of our attitudes and judgment calls remain ungrounded and lacking in rigor. Philosophy is not a free-floating, academic exercise in abstract concepts. Rather, if the aim of philosophical analysis is to bring to light the structure of our beliefs and to ultimately guide us in substantiating our decisions, then philosophy becomes the prerequisite for wise environmental policy formulation and decision-making. Philosophy provides the opportunity for articulating the foundations and groundwork in building toward more thoughtful and comprehensive sustainable development programs.

Phenomenology, Science, and Metaphysics

The philosophical approach that inspires this book is phenomenological. Phenomenology has been cast in many molds since its founder, Edmund Husserl, presented his own, unique "transcendental" phenomenological method.[17] From the hermeneutics of Ricoeur and Gadamer, to the existential perspective of Merleau-Ponty and Sartre—and finally, to the ontology of Heidegger, phenomenology has

answered to a variety of philosophical questions and a single, unified methodology appears elusive.[18] In Heidegger's own words, "there is no such thing as *the one* phenomenology, and if there could be such a thing, it would never become anything like a philosophical technique. . . . The only thing that is truly new in science and in philosophy is the genuine questioning and struggle with things which is at the service of this questioning."[19]

Despite diverse interpretive arenas, common threads of meaning can, nevertheless, be seen to weave their way among the different thinkers. For one thing, phenomenology is profoundly nondogmatic. Husserl described himself as a "perpetual beginner," meaning that philosophy could never be, properly speaking, a static accomplishment but was, essentially, open to further questioning and to the evolution of thought. Rather than present conclusive "theories," Husserl's own "investigations" avoided the pretense of categorical philosophical doctrines or treatises, engaging instead in a perpetual rethinking and, sometimes, even rejection of previous works. Similarly, Martin Heidegger describes his own philosophical journey as being "on the way," rather than conclusively established at any single point in time.[20] Spiegelberg is, therefore, right to describe the course of phenomenology as a *movement*, rather than the development of a single doctrine.[21]

There are at least two reasons why phenomenology chooses this route against dogmatic theoretical assertions. First, I would argue that phenomenologists are wary of the immodesty of some scientific methods that would presume to be capable of an absolutist, value-free grasp of objective facts. Second, this wariness comes from an overall disillusionment in the aspirations and consequences of western metaphysical thought. Let me address each of these points in turn.

We cannot deny that we live in an epoch where, for many people, science defines what is real and true. Clearly, science has advanced knowledge in the modern world, including our understanding of such topics as the disappearance of rainforests, the ecological effects of over fishing and the extent of damage to the ozone layer by chlorofluorocarbons. At the same time, we must not forget that exercising scientific judgment requires the *interpretation* of facts. Facts are not merely value-neutral, ahistorical entities that the expert divines once and for all. The meaning of a fact depends on the question you ask and on the context that is presupposed in order to ask the question in the first place.

Phenomenologist Martin Heidegger has spoken of the "greatness and superiority of natural science during the 16th and 17th centuries"—a greatness that rests in the fact that "all scientists were philosophers. They understood that there are no mere facts, but that a fact is only what it is in light of the fundamental conception, and always depends upon how far that conception reaches."[22] More recently, scientific thinking has come to presume that "it can manage sufficiently with facts, or other new facts, while concepts are merely expedients which one somehow needs, but should not get too involved with, since that would be philosophy."[23] A dichotomy is, therefore, set up between apparently objective, empirically verifiable and

immutable factual knowledge on the one hand, and subjective, historically variable philosophical opinions and values on the other.

Environmental philosophers, together with more enlightened scientists, today recognize, however, that this rift between facts and values is misplaced.[24] Consider a telling example relating to energy policy. While scientists may accumulate facts relating to the quantity of resource depletion or costs of generating plants, those facts lead to very different policies, depending upon whether they are being interpreted within the context of the priority of supply or demand. From the point of view of supply, many argue that, since we are running out of energy, we require new energy sources (such as from nuclear fission breeder reactors). From the perspective of demand, development of "appropriate technologies" and strategies to increase energy efficiency—better home insulation, increased transit use, and solar power—would be judged as more suitable energy policies.

While the set of facts may, in both cases, be the same, it is inevitable that human judgment will color the interpretation of those facts.[25] Scientific "facts" do not subsist in the realm of eternal truths, separate from human judgment but, on the contrary, only appear as true on the strength of the human interpretation that makes them meaningful in the first place. When anyone presumes to be in a position to conclusively prove, once and for all, a theory about the natural world, phenomenologists remain skeptical, because they know that it is in the nature of understanding that it can never attain to an absolutist grasp of that world. A more modest view recognizes, in the words of environmentalist Robyn Eckersley, that "nature is not only more complex than we presently know, but also quite possibly, more complex . . . than we *can* know."[26]

Why have we, in modern times, come to have such faith in the immutable power of scientific facts? The answer to this brings us to our second point, namely, that phenomenologists avoid the comforts of closed systems and dogmatic theoretical constructs because of a disillusionment in the course of the western metaphysical tradition itself. Heidegger's phenomenological investigations showed how metaphysics, from the time of the ancient Greeks, has supported a worldview that idealizes absolute certitude and the comfort of timeless truths—and it is such a metaphysical presupposition of the nature of reality that grounds the culmination of the tradition in science.

According to Heidegger, Plato inadvertently sowed the seeds of a tradition that, of necessity, moved toward ever increasing abstraction and a loss of the very wonder that he had argued was the source of genuine philosophical thought. Beauty, order, and the good for Plato subsisted in a world of ideal forms, in some manner separate from the everyday world of becoming and flux. "It was in the Sophists and in Plato that appearance was declared to be mere appearance and thus degraded. At the same time Being, as *idea*, was exalted to a suprasensory realm. A chasm, *chorismos*, was created between the merely apparent essent here below and real being somewhere on high."[27]

This distinction between an eternal, transcendent realm of universal truths and mundane existence persisted throughout the Middle Ages, when philosophers sought structure and meaning in theological revelation and divine law. The "definitive preeminence of the supersensuous" is grounded now in God the Creator, whose revealed truth is proclaimed by Church doctrine.[28] As *doctrina*, truth is, in principle, capable of being collected within the *Summa*, that is, the systematic collection of the entire heritage of ahistorical, doctrinal views espoused by theology and absolutely bound to the teachings of the Church.

Heidegger's argument here is that the equation of truth with the eternal and supersensible, unchanging universe was present at the origin of metaphysics, and persisted through the Middle Ages, even beyond the modern disillusionment with religion. With the decline of the religious worldview, the way was opened for a grounding of reality and truth in human beings—especially, the enduring truths revealed to human rationality. Now sense and intelligible order were to be attained by way of human reason and scientific logic.[29] Descartes' aspiration to invest philosophy with the certitude of a science was only further testimony to the search for order in rational principles. The power extended by technology to human beings similarly corroborated the appearance of human, calculative mastery over the environment as a whole.

At the end of this metaphysical tradition, phenomenologists despair of the worldview that places truth beyond history—whether such a worldview grounds truth within the realm of the supersensible world of ideals, or within the hierarchical order of divine creation, or, finally, within the dogmatic assertions of scientific rationality. There is a sense in which western philosophy has tired itself out in abstractions at the end of the metaphysical tradition, becoming strangely irrelevant to the challenges of daily human life. As philosophy strives to attain the certitude of science, metaphysics itself collapses into a reductionist mode of thinking that no longer admits poetic inspiration or artistic revelation within the domain of the academic discipline.

Phenomenology is, in some sense, a vocal reaction to and rethinking of the essence of the metaphysical tradition that we, of necessity, inherit in our modern world. Seeking to reawaken us to what Edmund Husserl called the richness of a lived-world "of essences of mental processes which are not abstracta but instead concreta," Husserl's aim in developing phenomenology as a "strict science" was to suspend all epistemological and metaphysical presuppositions to reveal the "things themselves" (*Sachen selbst*) as they are presented to us in our original and immediate experience of the world, prior to the construction of theories, dogma or preconceived hypotheses.[30]

Martin Heidegger, Husserl's student, inherited from his teacher the famous maxim of phenomenological thought: "To the things themselves!"[31] In his own unique language, Heidegger argued that the aim of phenomenology was "to let that which shows itself be seen from itself in the very way in which it shows itself

from itself," namely, unadulterated by abstractions or unwarranted judgments.[32] By shedding light on the taken-for-granted, prepredicative origins upon which explicit theoretical reflection and scientific understanding are grounded, phenomenology emerges, according to Husserl, as "the secret nostalgia of all modern philosophy" and ultimately, as "first philosophy" itself.[33] Similarly for Heidegger, it is phenomenology as ontology that offers a way to uncovering the most fundamental, hidden ground of all questioning, that is, the meaning of Being itself.[34]

Phenomenology in a Postmodern World

As the twenty-first century draws to a close, phenomenology finds itself at the end of an era where the death of God is superseded even by the death of reason. Two world wars and the capability of global destruction serve as reminders that rational principles teeter at the edge of an inexplicable void and the mysteries of human passion. Strangely, in an era of overwhelming technological dependency and computerized mastery over the world, our doubt in the very power of reason that steered us to the current condition manifests itself both in New Age mysticism and postmodern skepticism. The death of a transcendent God momentarily opens the possibility of an alternate foundation in the principles of human reason. When it becomes evident, however, that human beings are guided by passions and instincts instead of simply intelligible principles, the measure and order grounded in immanent reason itself is threatened.

There are many thinkers who celebrate this moment in history. Freed from the authoritative shackles of metaphysical deity and abstraction alike, the possibility presents itself of a renewed awareness of our historical rootedness. Philosophy has finally recognized the futility of its pretense to being a universal science. In this respect, there is some promise of its recovering a sense of self by remaining open to the concreteness of the lived world—a world interpreted from within, rather than in terms of imported categories and rationalizations. Instead of seeking to impose a static, universal metaphysical structure upon the synergism of the natural world, the way remains open for a more receptive *listening* to the rich, variegated revelations of temporal meaning of a complex and dynamic cosmos. It is this very receptivity and openness that is celebrated by phenomenology itself.

Yet in the abandonment of intelligibility and reason lies a danger as well. The postmodernist fashion refuses the "consolation of correct forms."[35] War is declared on totality by postmodern thinkers who proceed to "work without rules."[36] In an era that lacks some of the structures of past centuries, the risk is that disorder may reign. The withdrawal of reason may manifest itself not only in the horrors of Nazi Germany, Rwanda, or Yugoslavia. As Werner Marx points out, another insidious danger looms, and this is the danger of indifference.[37] In a world with no reason and no apparent order or purpose, apathy may reign. Such apathy

may find concrete expression in a disinterest for one's community, for other people, and for the environment. In the end, this disinterest threatens the very meaning of selfhood and the dignity of being human.

Inasmuch as it recovers the wonder that philosophy has forgotten, phenomenology offers a way of thought that neither collapses into a war against reason, nor abandons the concrete essence of the lived world. One of its primary tasks is to articulate essential meanings as they appear to human understanding. It seeks to discern underlying patterns of meaning that may not be self-evident but that permeate our efforts to interpret the world in which we find ourselves. In aspiring to more than a fixed system of theoretical conclusions, the phenomenological movement is a way of seeing the world that is never definitive but still aims to crystallize some essential truths in their historical and cultural rootedness.

While the phenomenological investigations of this volume make some appeal to experience instead of to abstract theoretical constructions, this does not mean that the book is merely one person's subjective account of elements of sustainability. It is a common misconception to conclude that phenomenology is simply an arbitrary, first-person recounting of facts as experienced by a lone subjectivity. For instance, in his otherwise thoughtful introduction to an anthology of phenomenological works, Robert Solomon describes phenomenology as a "first-person description . . . of one's own consciousness of the world."[38] This kind of account will then lead geographers like Hok-Lin Leung to conclude that "humanistic streams such as phenomenology . . . focus on consciousness."[39] Phenomenology, consequently, for this author "has severe limitations as a 'scientific' method because it emphasizes the unique, often at the expense of generalizations and verification."[40]

The problem with this kind of characterization of phenomenology is that it sets out a dichotomy between objective analysis of facts vs. arbitrary, subjective storytelling. As going beyond the metaphysical dualism of subject and object, phenomenology seeks to describe the originary belonging of human being-in-the-world that is ontologically prior to any subject/object split.[41] Phenomenology seeks to avoid both the immodesty of supratemporal, generalized claims about the world, but it equally avoids merely relativistic, first-person storytelling where "just anything goes."[42]

Thomas Nenon has it right, in my view, when he explains that phenomenology is about "the possibility of certain kinds of experiences which any reader should be able to recreate imaginatively on his or her own and thereby see that the possibility for such an experience is universal, even if the reality is not."[43] The phenomenological method is not, properly speaking, inductive, as it does not seek to catalog the frequency of experiences or to determine statistical correlations between past and future events. Nor is phenomenology a deduction of universal norms from logically necessary principles. Rather, "it exhibits possibilities *as* possibilities that any human being could undergo without claiming that in either a logical or empirical sense, they necessarily follow from certain other conditions."[44]

While the present volume, then, cannot presume to provide a cure-all manual of solutions to complex, interdisciplinary issues of sustainable development, the work takes the reader on a phenomenological journey that seeks to unearth some taken-for-granted assumptions and to provide some alternative visions of the essence of sustainability. Hopefully, readers will be led to critically examine some of their own assumptions and to see the world from alternative perspectives. These new perspectives, then, should serve to guide us along unique pathways that each of us travel in the effort to achieve sustainable development, locally and globally.

Paradigms, Attitudes, and Sustainable Development

Taking the cue from phenomenology, the goal of this book is to rethink "sustainable development" by questioning the foundations of current interpretations. Our attitudes are not something that we consciously superimpose upon our everyday activities. On the contrary, taken-for-granted assumptions shape the way that we view the world, and implicitly guide our decision-making on environmental matters. We may borrow a Cartesian image here: our thinking on environmental issues is like a tree.[45] The individual disciplines, from economics to chemistry, are like the branches. The trunk integrates these disciplines in the synthesis of ecology. The roots of the tree, however, take their nourishment from the soil of paradigms and attitudes that while hidden, nevertheless provide for the very existence of the tree. Unless we seek to comprehend better the essence of that soil, perhaps even modifying its structure, there is a growing fear that the tree itself can no longer be sustained.

A recent case in Canada shows the importance of taken-for-granted beliefs in environmental policy.[46] In 1985, the Canadian Minister of Agriculture cancelled the registration of the herbicide "alachlor," which had been used by Canadian corn and soybean farmers since 1969. Alachlor's original registration had been based upon toxicological studies performed by the scandal-ridden Industrial Biotest Laboratories, whose methods and results had been shown in some cases to be invalid. Consequently, the supplier, Monsanto Canada Inc., was asked to submit replacement studies to the Health Protection Branch (HPB) of Health and Welfare Canada. Based upon these new reports, as well as studies presented to HPB and to the Environmental Protection Agency in the United States, Health and Welfare Canada concluded that "alachlor is one of the most potent carcinogenic pesticides presently in use, and should be removed from the market as soon as possible."[47]

What is significant about this case is how the identical set of laboratory studies were differently interpreted by the various parties involved in the final policy decision. On the one hand, the government argued that the very *possibility* of carcinogenic risk was sufficient to warrant removal of alachlor from the market. Here,

risk was seen as unacceptable in terms of an "absolute" standard of safety, independent of other relative risks or benefits. Risk assessment was also based on worst case scenarios: the safety of alachlor was to be based on those rare cases when protective clothing of applicators might not be worn or might for some reason be ineffective.

On the other hand, Monsanto countered that more attention needed to be paid to the *actual* degree of carcinogenic risk. The mere possibility of risk was to not to be considered in isolation from benefits and relative risks. For instance, economic benefits of alachlor to farmers had to be included in the risk assessment as well. Ultimately, the herbicide was not reinstated, even though the Review Board agreed with Monsanto that, while alachlor had been shown to be an *animal* carcinogen with tests on rats, it could only be considered a "potential" rather than "probable" human carcinogen.

Altogether, this case shows how risk assessment—based upon the identical set of "objective" scientific "facts"—nevertheless may result in a broad range of interpretations of the significance of those same facts. The phenomenological task, in such instances, would include illumining the taken-for-granted assumptions that impact, indirectly though pivotally, upon our explicit deliberations on environmental risk analysis.

Consider another example—one that sheds some light on the importance of prethematic attitudes underlying the suburbanite's well-cataloged dependency upon the automobile. The use of the car can be described operationally in terms of a factual inventory of how often the car is driven, for what purpose, for what duration, and so on. We can, in this way, delineate observable characteristics of the utility of the car for the suburbanite, which is often the task of the traffic engineer.

Yet we avoid in such descriptions what automobility *means* experientially for the lover of cars. Observing how and when others use their cars tells us something about car use, but it is not the whole story. In fact, although I may rationally "know" all the good reasons why I *should* leave my car at home and take the bus instead, I may deceive not only others but myself when I offer less than compelling rationales for taking the car. It is the task of phenomenology to seek to shed light on the deeper, experiential significance of what, in describing auto hegemony, Durning refers to as eloquently as "carcooning."[48] I have found it illumining to run an experiment in a number of my environmental classes over the years, where I ask students to imagine that they have won a windfall lottery and can purchase the car of their choice. Later, they are inevitably embarrassed to recall their wildly enthusiastic descriptions of the automobile of their dreams—the very car that, on other occasions, they criticize as unsustainable.

But it is not only academics who recognize the need of a rethinking of hidden assumptions if we are to move toward our goal of sustainability. Public policy makers say much the same thing. Consider the example of the phenomenon of urban sprawl. The detrimental consequences of suburbs have been cataloged by

numerous authors. The fundamental dependency upon the automobile is recognized to result in increased traffic congestion and environmental deterioration. Disappearance of prime agricultural land, increased infrastructure costs, and decline of the traditional nuclear family all point to the fundamental unsustainability of sprawl associated with traditional subdivision development.[49]

Because of these direct costs, many governments are adopting policies to encourage increased densities within urban and suburban communities. In Canada, and particularly in Southern Ontario, there is widespread government support for "intensification"; in the United States, a parallel concept is "growth management."[50] A serious obstacle to implementation of intensification policies, however, is being encountered in ratepayer opposition to any increase in housing density.[51] A 1991 poll suggests that on average, 39 percent and 36 percent of Canadians, prefer to live in "older" and "new" suburbs respectively, while only 22 percent prefer the downtown or inner city.[52] Consequently, in a discussion paper entitled "Reflections on Sustainable Planning," the Canadian Institute of Planners offers a number of specific recommendations:

- Review historical ideas, such as the garden cities. Why did they go wrong? What can we learn?
- Clarify the basis of public choice. Find out why people prefer low density suburbs.
- Use that information to make concentrated cities more liveable. Once you overcome the technical problems, how do you make concentrated cities attractive so that people will *want* to live there?[53]

Similarly, in the United States, the 1996 report of the President's Council on Sustainable Development recommends changes in fiscal planning that will help to counter sprawl. At the same time, the council explicitly recognizes that many Americans still do appear to prefer lower density suburban living to more technically sustainable, higher density alternatives and it encourages planners to take such preferences most seriously.[54]

As much as the public *explicitly* may recognize the technical environmental costs and unsustainability of low density development, on a more subtle level of attitudes, values and choices, that same public often is not prepared to choose the more sustainable alternatives associated with increased densities. Moreover, in the absence of a fundamental shift in public attitudes, governmental policies directed toward "intensification" risk remaining purely academic.

Similarly, in *Our Common Future*, the World Commission on Environment and Development recognizes the need of changing human values and attitudes toward the environment and development.[55] Inasmuch as inequality is cited by the commission to be the planet's main environmental and development problem, the affluent are charged with an obligation to adopt different lifestyles more in tune

with the planet's ecological means: "Making the difficult choices involved in achieving sustainable development will depend on the widespread support and involvement of an informed public."[56] The crux of the problem, however, is clearly articulated when the question is asked: "How are individuals in the real world to be persuaded or made to act in the common interest?"[57]

Certainly, modifying human attitudes will require new strategies relating to education, public awareness, and institutional development. Before we make attempts to *change* human attitudes, however, we need to achieve a more comprehensive *understanding of the foundations* of such attitudes. This is where philosophy—and specifically phenomenology—may offer a significant contribution in seeking to bring those attitudes to light. It is important to remember, however, that these worldviews that phenomenology seeks to describe are more than individually willed, explicitly recognized opinions that one chooses to uphold following a lengthy process of reflection. Very few people take the time to carefully articulate and substantiate their value systems. I would argue that, even those individuals who do so, can never fully specify every moral precept because explicitly formulated judgments always occur within the *implicit* context of a human horizon of understanding. For instance, the very language we use "frames" the world in a structured way so that communication may occur. Although the frame is the condition of the possibility of understanding, it itself is not part of the picture. It must always serve as the ground of the explicit articulation. Otherwise, the articulation could not occur.

Kuhn persuasively demonstrated how tacit knowledge in the form of shared "paradigms" grounds meaningful discourse.[58] Although it may not be always evident, shared expectations regarding criteria for truth, language, rules, and standards for practice affect the evolution of acceptable methodologies within any particular tradition. Such paradigms provide the context for communication until the breakthrough of a genuine revolution overturns one worldview in favor of another.[59]

We may not often deliberate about the meaning and significance of these taken-for-granted horizons of understanding. The task of such self-reflection is hardly straightforward. Consider Gadamer's insight that, in the study of language, "we are seeking to approach the mystery of language from the conversation which we ourselves are."[60] Language may be learned but when it is appropriated as one's own, it defines our very Being-in-the-world. As such, language is not normally critically reflected upon but, rather, constitutes the very ground of our meaningful encounter with the world.

All in all, we all have our own personal opinions about people, events, and entities in our world. We each are able also to articulate our own set of explicit values on certain issues. More than this, we are culturally embedded and historically defined in terms of our taken-for-granted paradigms that serve as a framework for rules and principles guiding our actions. Even the language that we use to assign

meanings provides the most fundamental, taken-for-granted horizon of understanding. We may not often reflect upon these implicit contexts of meaning. When we do so, however, we recognize that we simply could not *be* in their absence.

A major task for phenomenology is to help shed light on the foundations of deeply rooted human motives relating to sustainability and on how they are embedded in taken-for-granted historical and cultural worldviews. Accordingly, part I of this book begins the phenomenological journey by critically examining the calculative foundations of current paradigms of sustainable development. Part II provides an alternative horizon for discussions of sustainability from the perspective of phenomenology. Part III addresses the feasibility of holistic approaches to planning in a postmodern era and discusses how phenomenology may affect our understanding of sustainability beyond *Our Common Future*.

Overall, the reader may expect some overturning of commonly accepted values. A call may sound for coming to terms with certain finite demands that we would prefer to deny. Some results will necessarily remain inconclusive. On the other hand, we may hope to make some progress in raising awareness and in uprooting some unsustainable patterns of living. It is in an effort to reawaken philosophical questioning of the foundations of a sustainable future that this book has been written.