

John Rensenbrink

DIALOGUE AND BEING—AN ONTOLOGICAL INVESTIGATION

ABSTRACT

This essay affirms the proposition that dialogue emerges from being itself. There are five parts: being and nature; how it follows that dialogue emerges from being itself; full dialogue; why it is that dialogue has faltered; and ground for optimism, given the noticeable turn in recent decades to an ontology of relationship. We, the human species, are part of nature. We are part of an evolutionary development. The full comprehension of this reality leads to critique of the separation between nature and supra-nature in the ontology of ancient Greek philosophers and of Christian, Judaic, and Muslim religions—a separation that posits the hierarchic superiority and dominance of the Idea as in Plato and of God in the religions, replacing the unity of spirit and nature in the earlier animistic religions. Nor has the ascendance of mechanistic modernity in the work of Bacon, Descartes, Newton and their heirs to this day changed the separation. The Cartesian formulation of “I think therefore I am” backed up by the notion of a deistic first mover, scraped nature clean of spiritual and moral qualities and made it open to industrial exploitation, resource extraction, and degradation. Einstein and the quantum theorists who developed his breakthroughs led science to a new view of nature as a world of internal relations. This provides scope and substance for re-thinking nature as revealing multiple sets of interactive relationships. Interactive relationships are the ground for the gradual development of dialogue. The older ontologies of separation had little scope or support for dialogue since the dominating style and substance of relationship was consumed in patterns and styles of command and obedience. The new ontology of relationship reveals and fosters the reality of interactive communication and dialogue. Full dialogue is a mutual awareness and authentication of each other’s lived being leading to deeper and deeper levels of successful understanding and action together. Yet dialogue has had to take a back seat for much of human history since the emergence of stratified and hierarchical agrarian societies capped in recent centuries by industrial command structures and technologically advanced warfare. But the new understanding of nature and of its multiple interactive relationships is making significant headway and there is ground for optimism that dialogue will at some point come fully into its own.

Keywords: being; dialogue; nature as self-organizing; evolution; animistic religion; the Idea (Plato); Christian theology; deism; internal relations; interactive communication; science and religion; dynamic energy; repulsion/attraction; full dialogue.

The question presented for discussion is: “What are the fundamental roots of universal dialogue?” Possible answers have been posed. They include: “Does universal dialogue emerge from the attributes of human nature? Or does it emerge from culture (a particular one, or is it inherent in all cultures)? Or from *a priori* theses of systems of knowledge? Or from ethical systems? Or from more general axiological systems? Or does dialogue emerge from being itself?”

I make the argument that “dialogue emerges from being itself.”

The essay is in five parts: being and nature; how it follows that dialogue emerges from being itself; full dialogue; why it is that dialogue has faltered; but there is ground for optimism.

BEING AND NATURE

At first one feels drawn to the notion that the fundamental roots of universal dialogue emerge from the attributes of human nature. But on further reflection, I realize that human nature is not the whole of being. It is a part of being—a manifestation of being. One must look beyond our human nature in order to locate the being in and through which, and by which, the human is constituted.

Several decades have passed since I first (and suddenly as it seemed) encountered the proposition that we, the human species, are part of nature. This meant to me that we are not “above” nature; nor are we “below” nature. As this came through to me as a fact, and as concomitant therewith, I absorbed the further fact and implications of evolution, I came to realize more and more fully that to hold that we human beings are partly in nature and partly not in nature, and that the part that is in nature is secondary, if not inferior, to what is outside nature, is a major ontological error. We are embraced by nature. Nature offers and provides the source and ground of our being. Intellectual shocks and adventures followed for me from what I now would describe as an overwhelming realization.

In order to locate the being in and through which the human being is constituted, I draw on the thought of thinkers like Edmund Husserl, Max Scheler, Maurice Merleau-Ponty, and David Abrams; on philosophers pursuing a post-Newtonian understanding of the world such as Ilya Prigogine; on feminist and ecofeminist thinkers such as Sandra Harding; and on the great outpouring of ecological studies and analyses in the last thirty years. [COMMENTARY 1]¹ The conclusions about the nature of our world and the nature of nature stemming from these investigations prepare the ground for my argument that dia-

¹ All the commentaries are at the end of the paper.

logue is rooted inherently in the way of all things—rooted in the structure of being, as set forth in the second part.

What Plato sought, I have come to realize, was an appeal from nature to something outside of nature. What Augustine and the Christian tradition sought was outside of nature. God, in their view, was a lofty being, the source and ratification of all being. The ancient Greek and medieval Christian concept was to assume an Archimedean point, a God or Idea outside of nature, in terms of which nature is judged and dealt with. The natural world is considered contingent-being, dependent for its true being on God or the Idea. Access to true being (of God, of the Idea) is through contemplation and, for the Christians, coupled with obedient worship. For Aristotle, participation in the affairs of the world can be a stepping stone (though also a barrier) to encounter with the divine and thus to contemplation as the highest form of life's activities. Plato has much of that in his writing as well. [COMMENTARY 2]

One might initially think that Bacon, Descartes, and Newton and their worldly followers like Hobbes, Locke, Adam Smith, and Rousseau—corrected for, and rejected, the bias that heavily favored what is beyond the natural world and “this life.” But not so. Expressed most clearly by Descartes, radical doubt establishes a new Archimedean point separate from “mere” nature. The mind finds certainty in the proposition “*cogito ergo sum*” (I think, therefore I am”). This Archimedean point, a point radically separate from nature, is ultimately guaranteed its reality by reference to a first mover, a deity, outside the universe, who presides as watchmaker over a machine-like universe, a universe composed of hard and irreducible and separate atoms. Nature is scrubbed clean (note, for example, Locke's attack on Plato's notion of innate ideas). Nature is henceforth treated as an instrument of mind, a mind that is radically separate from body. Nature is made available for control and for resources to be exploited in accordance with the rules and contrivances of right reason, a reason rooted in “I think therefore I am.” [COMMENTARY 3]

In all of these pictures of being, the universe is composed of things separate from one another. External relations characterize all things (this/not this, either/or). Separateness is central, not relationship.

Albert Einstein up-ended the Cartesian and Newtonian atomistic view of physical reality. [COMMENTARY 4] His thought experiments led to splitting the atom and to developing the principle of relativity. These showed a way to think about physical reality that focuses on internal relations and inclusiveness rather than external relations. Even so, Einstein still harbored hopes of finding the one concept or unified theory that would “explain” all things; in this he revealed a continued hankering for a wholly unified and fixed force, an Archimedean point that would not “play dice with the world.” Implicit in this hankering for something fixed is the re-instatement of external relations.

He apparently did not follow the direction of his own thinking but hearkened back to the fear that if nothing is fixed then there is no ground to stand on, no

God to establish a point of departure and return, no Archimedean point from which to reason. But as later thought shows, the fact that nothing is fixed does not mean that nothing is ordered, that it's all chaos. Things are located and locate themselves through relationship.

The notion of internal relations grew from the work of quantum theorists in the decades following Einstein. [COMMENTARY 5] They followed the direction of his work, building on his great breakthroughs. Quantum theory provides a revolutionary perspective and direction for thought and understanding. The universe as a whole is seen as a set of internal relations; within the universe sets of internal relations dynamically operate and inter-relate. Each set is composed internally of relations. Each set inter-relates with other sets within the whole.

But the whole is not fixed. Nor are the sets of internal relations (whether physical bodies or groups of bodies) fixed as if they are self-contained with walls around them. There are no walls, but there are boundaries.

The notion of internal relations does not therefore mean that there are no borders. The whole, because of received language about "the whole", may conjure up the image of a closed universe. Not so. The borders, correctly understood as having boundaries (not walls), reveal the question of what lies beyond the borders of a given body or group of bodies, including that group of bodies composing the universe as we have thus far been able to perceive it.

It is critical to realize that the existence of the question (the question of what lies beyond the borders of a given whole) applies to the universe as a whole and to all wholes within the universal whole. Nothing is permanently fixed, not even the North Star. The solar system is not fixed. Planet Earth is not fixed. The ecosystems of the earth are not fixed. Geo-political boundaries are not fixed. The stone walls separating farmers' fields are not fixed.

The universe is composed of bodies each with internal relations among their parts and between themselves and other bodies; and the bodies, having borders, are in actual or potential interaction with other bodies. What is "within" and what is not now within but may yet be "within" and what in any case is not within but acts upon what is within—all this means that, though embodied, the bodies are open. And are open to the question mark that comes right along with the given body's existence.

Being as being belongs as the central and focal attribute of nature. Nature produces life and life manifests the being that nature has produced. It is incorrect thinking that imagines or invents or infers a force separate from nature acting upon nature as from without, dominating it, fashioning it, controlling it. The force that is imagined, if and when and where it is real, is within nature. Better said, it is woven into the texture, the warp and woof of nature. Even better said, it is nature. It is important to add a caveat. It is nature unfixed, dynamic, and changing. Nature opens to that which it is not. Nature is open to that which is not within and may be discovered to be without, which, once discovered is drawn within. That "drawing within" still leaves the whole open to that which

continues to be “without.” The question mark remains in place. Mystery continues to be in place, arousing curiosity, arousing fear, but also enabling the experience of grace.

Does this deny God? No. Three replies. It relocates God—from an entity outside of the natural whole to a force within the whole. It revolutionizes God’s attributes so that we assign non-dominating qualities to God (he or she is a friend not a potentate). And there is a relation between the force within the universal whole that we associate with God with the question mark at the boundaries of the whole. The question mark is supremely interesting. Science and religion tend to deal with the question mark in different ways.

The critical thing to my way of thinking is to note that the relationship of what is within (the relatively known) to what is or may be or is inferred to be or assumed to be without (the relatively unknown)—the critical thing is that the relationship is an interactive one. It approaches the possibility of dialogue. The way science conducts the dialogue and the way religion conducts the dialogue differ, but both in their own way conduct dialogue. Neither has ground to stand on to assert dogma, neither scientifically claimed dogma nor the more familiar religious dogma.

Fixed certainty for either is neither scientific nor religious. Yet fixed certainty seems to be the temptation into which each falls repeatedly. The fall is because they do not see the boundary between the whole and the other as a boundary but as a wall. And both are always yearning for ultimate certainty, refusing to acknowledge that dialogue does not require such certainty—in fact it precludes and trumps certainty. Understanding dialogue is a solvent of the fear that leads to the demand for certainty. Understanding dialogue is also a goad to creative research for the scientist and to creative faith for the religious person. Both reach into the mystery, but in different ways. We must turn to the second part of this ontological investigation for an examination of dialogue and its antecedents.

HOW IT FOLLOWS THAT DIALOGUE EMERGES FROM BEING ITSELF

Dialogue is inherent in all life in some form—however primitive and simple the dialogue may be or however advanced and complex. It is through dialogue that relationships among and between the distinct and diverse embodiments of nature are mediated, realized, and enhanced. Dialogue is not just another word for communication, but is a profound process. Without it, we become separate from one another and divorced from being. The life work of Henryk Skolimowski is a living testament to the proposition that dialogue is immanent in life itself. [COMMENTARY 6]

The fulfillment of being within us requires dialogue. Dialogue frees us and bonds us at the same time. If it were not for dialogue in some form, we could and would spin away from one another; or we could and would do the opposite

by moving, or bumping sharply, into one another, collapsing into one another, erasing each other's identity as that embodiment of being.

"In some form." I am thinking here of the most primitive form of dialogue. Or we might instead simply look at it from the point of view of the elements out of which dialogue potentially can come.

Implicit in matter is the spark of life. This is an ordinary way of saying it and would seem to be adequate for usual purposes. But that still is not quite saying it. What we are trying to discern is the reality of that which is there, not just to find the words that say it. But, at the same time, we need words to convey what's there. Words can reveal it, or conceal it. Words can open our minds and consciousness to what it is; or they can lead us hopelessly astray. But we must try.

The spark referred to should give us a start. What can cause a spark? The encounter of two or more elements can produce it. But, let's get closer if we can: the encounter itself is the spark. That from which the two or more elements come is the burst of pure energy. Inherent in pure energy is both the thing and its opposite and the two together in their encounter with each other is the spark. The encounter is a relationship. Not a static relationship but a dynamic one. Not two or more elements separate from one another, but two or more elements in dynamic movement with one another. Nor is it a matter of equilibrium. If and when what seems like equilibrium occurs, the equilibrium is shattered by change—fueled by the inner impulses of the energy in all the components involved.

This could then be another way of saying that one is two, inherently so, so that two in relationship are both one and two—both united and distinct. We must hold in mind that the encounter of the elements is and continues to be an interactive one, each acting upon and being acted upon. Though this suggests repulsion, it also with equal strength and validity suggests attraction. It's not as if the elements in contact with one another are just objects that appear together or are thrust together by some form of gravity. The communication is interactive. What then proceeds is the necessity of dialogue. What also proceeds is a dynamic opportunity for ever better dialogue.

What pure energy evolves into is interactive communication (dialogue). The relationship is a unity, however stretched the unity may be, or however close the unity may be. And the relationship, simultaneously, is the distinct identity of each element.

I have used the word "element." I could also have used the word "body." The proposition advanced here is that interactive relationship inheres in all things in nature, from the simplest elements to more and more complex organisms; i.e. bodies and groups of bodies.

But, surely, one may say, dialogue can only be ascribed to conscious bodies. Dialogue does not take place among bacteria, for example. I can agree with that, but that is not the decisive question in this investigation. What I am concerned

to bring fully into view is that there is a structure of being that characterizes all things, from simplest and smallest to very complex and large. That structure is an interactive relationship throughout. It is this structure that forms and informs the basis for dialogue wherever it occurs and whenever and at what point evolutionarily it occurs, including of course dialogue among conscious bodies.

There is a natural tendency to engage in interactive communication throughout the various relationships of nature. One may say that this natural tendency comes to fulfillment as dialogue in the relationships of conscious bodies. One could also say, however, that intimations of dialogue characterize the relationships of creatures other than the human species as well. [COMMENTARY 7] We are so used to thinking of all things as separate one from another, living as we do (especially in the west) in a culture heavily conditioned by mechanistic ideas. The separation-ism of the mechanistic world view makes it seem unlikely that seemingly non-conscious bodies communicate, much less communicate in an interactive manner.

But as the mechanistic world view fades, there more and more comes into view the realization that relationship is real throughout the universe and in all its parts; that this relationship of one with another, and of each one with nature [COMMENTARY 8], pulsates with the energy of each element or body (each entity) in the relationship; and that this distribution of energy to all entities fosters and fuels a disposition favoring interactive communication.

Interactive communication can reach the level of full dialogue at a certain evolutionary point. But that point would and could not be reached if it were not for the relational, self-organizing, and interactive structure of being that is the evolutionary antecedent on which full dialogue is built.

FULL DIALOGUE

Dialogue is just that: dialogue. Yet there are degrees of its development and fullness. I think of it not only as an interactive exchange (which it can start out from) but as a mutual engagement with one another's being. This means that my awareness of you is that you are a being in your own right and that you are a self-starting being and that as such you are aware of me as a similar kind of being. This depth of mutuality enlivens both of us and can make each of us and together greater than we would be alone and separate. It frees us to be ourselves, surely, and it bonds us to be in each other's common light. This brings satisfaction and, not infrequently, exhilaration. The satisfaction and the exhilaration do not so much come from the dialogue being a smooth and balanced interaction. Engagement with another self-starting being is seldom smooth; and though balance occurs it come as a result of an interaction that has in it a lot of creative tension. The relationship is dynamic and moving; balance is won through the process of interaction, not as if once balance is found it remains rigidly in place. Thus the word "full" is misleading if it means that a balance has been reached

and is set in stone. In an important sense, dialogue is never full, for the more it develops the more it expands in depth and meaning.

As I write this, I do not want to seem as if I think of dialogue as having fully arrived in our species evolution or that it happens automatically. As I have endeavored to show, there are many antecedent moments or stages in the gradual development of dialogic communication.

But having arrived, why then has it not become the characteristic and common feature of human communication and action? It must be admitted as a matter of disappointing fact that dialogue has faltered time and again. Sometimes it has failed entirely. It may be seen but barely used, even barely tolerated in public and private affairs. And yet, dialogue has roots deep in the structure of being itself. Why, when its full potential seems within our species grasp, does it seem that its power has sadly waned?

REASONS WHY DIALOGUE HAS FALTERED

There are many reasons. I will cite several.

In evolutionary time, our species has not had very much time to practice dialogue. With more time and more experience, dialogue and a dialogic consciousness can take full root. This would seem to be a reasonable observation, not an excuse but a wise realization. Dialogue takes time to develop and mature.

Unfortunately, our species does not have very much time. Species ruination has become a possibility. If we are to save ourselves, it's time we turned to dialogue in a serious way.

I will briefly touch on some of the leading difficulties hampering the development of dialogue in our species.

The growth of consciousness in the human species produced what was a step forward surely. In epochal terms it must have been a very heady and galvanizing time for the developing human beings. They could do things they never could have imagined were possible. As their powers of thought and skill grew, and as their technology improved and expanded into more and more areas of life, so grew their expectations. But it turned out that the planned or expected results often did not come about. Unexpected consequences increased in number and severity of repercussions. The gap between expectation and fulfillment brought regret, anger, impatience, and the search for explanations, and for scapegoats. The explanations took on lurid forms often and led to human sacrifice. The scapegoats were people outside the group or people within the group who were different.

Yet, side by side with these negative consequences of growing consciousness, there also grew countervailing sources also stemming from consciousness—greater understanding, science, the wisdom of the elders, feedback systems, the resort to law, ethical norms, and also conversation and dialogue. So that, though the negative consequences were and are potent for despair and dis-

aster, the positive consequences are also very strong and in potential, more potent.

Along with the growth of consciousness, the self-declared high religions of the world have made an enormous impact on human development. Yet for all their vaunted clarification, and (in their view) purification of our human access to God, they combined their strong spiritual insight with a haughty and destructive attitude and practice toward the animistic religions of indigenous peoples, which they sought to replace. To apply a homely but apt cliché, they threw out the baby with the bath water—the baby of the unity of the human and the natural with the bathwater of superstition. The unity of the species with nature was broken, the voice of nature was largely lost; the high religions became intensely idealistic, un-worldly, very uneasy about sex and the body in general, and were given to exclusionary practices and dogma. They often pitted their theologies—and even armed weapons—against one another. Their idea of a supreme and remote deity presiding with inscrutable authority over all things increased tendencies to hierarchy, control, and rule through fear. This not only provided no nurturing context or framework for dialogue, but stymied its growth. The emergence of Christianity saw an effort to restore a direct connection between the people and the divine. Jesus as the incarnation of the divine even while also and simultaneously a human being was that effort. But after a brief sojourn ending in his crucifixion and resurrection Jesus returned to the heaven from which he had come. He promised he would come back and would send a holy spirit to those who believed in him. A highly organized priesthood and church hierarchy grew up to superintend the connection of God with the people through this now remote but much celebrated Jesus.

Parallel with the high religions, societies left behind the economies and common social life of early peoples. Society became highly stratified. There grew the notion that it was normal for the few to rule the many and even for one to rule over all, mirroring the similar practice and beliefs of the high religions. Much energy, cleverness and force was needed to keep the lower orders subservient. [COMMENTARY 9] In such a context there was, and is, little if any room for dialogue. Aspirations for power and money and the conflicts arising from those aspirations superseded all else. Any gestures towards the use and usefulness of dialogue are only that, just gestures not seriously meant. This continues to be the case.

It is also tragically the case that as we as a species evolved and grew in economy, religion, political organization, technology, in our numbers, and in our conscious powers, we found ourselves caught in the vortex of endless warfare. In a book entitled *The Parable of the Tribes: the Problem of Power in Social Evolution*, published in 1984, Andrew Schmookler points out that we may lament the weary repetition in society after society of oppression and inequality, yet once a tribe or city-state or nation invented an organized military and used it to threaten, subdue and enslave their neighbors, then others had to follow suit or

perish. There followed inexorably, he argues, the proliferation of military establishments on fighting alert in each country and a tax system and legal order that must squeeze and dominate the people. There is much cogency in his argument. Given this chronic situation, the outlook for a turn to dialogue seems dubious if not impossible. The impulse to dialogue, present in us from the beginning of our emergence as a species, is blunted.

BUT THERE IS GROUND FOR OPTIMISM

And yet, there is ground for optimism. As human beings, sated with commercial pursuits, weary of constant oppression of the many by the few, and overwhelmed by constant warfare or threat thereof, begin to turn to nature for healing and knowledge, as is happening, the prospects for a turn to dialogue brighten. This essay shows that dialogue is part of the long evolutionary human heritage, from dialogue's embryonic beginnings to the present day. Dialogue is a crucial ingredient in efforts to change the world. If it is brought into the center of efforts to change the world, there is ground for optimism both about the future of dialogue and the future of humanity on planet earth.

COMMENTARIES

1.

Edmund Husserl (1859–1938) was among those in the forefront of those making an attempt at a thorough scientific revision of our view of nature, body and the sensuous life. Not that a rebellion against the drab and drear image of nature and of the body as part of that image of nature stemming from the early moderns had not already been made by poets and essayists and philosophers in the 18th and 19th centuries. But the bifurcation of the human and the natural had not been refuted or in any way abandoned. Science, with mainstream philosophy in its train, still meant the mechanistic world of the early moderns. Emotions, feelings, sensuous awareness, values, qualities of life were treated, at best, as something ideally good to have, but not really part of the underlying things of nature—not part of the nature of things in general, not part of the real facts of life. Husserl *Cartesian Meditations: An Introduction to Phenomenology*, 12th impression² was a pioneering force opening—though only slightly as yet—a pathway to a new scientifically based philosophy in our understanding of the natural world. Max Scheler (1874–1928), was a towering intellectual figure in Germany in the years immediately following the First

² Husserl, E. 1999. *Cartesian Meditations: An Introduction to Phenomenology*. Dordrecht–Boston: Kluwer Academic, 12th impression.

World War. He built on Husserl with his favorite concept, “the lived body”³; as did Maurice Merleau-Ponty (1908–1961) who courageously advanced the proposition that the body is the primary site of knowing the world⁴ (especially his *Phenomenology of Perception*); and as did David Abrams (1957–) in *The Spell of the Sensuous: Perception and Language in a More-Than-Human-World*⁵, building on Merleau-Ponty. In between those latter two philosophers, the women’s movement produced powerful critiques of the mechanistic world view and showed how deeply it was rooted in patriarchal understandings of the body, of nature, and of women. Sandra Harding, Julia Kristeva, and Riane Eisler are just a few of the cogent thinkers who have taken up the challenge. During the same time, 1970 forward, eco-philosophy came to the fore and has become a catalyst and beacon for a new understanding of nature and of the human project within nature. One may cite a host of fine writers, among them Rachel Carson, John Muir, Arne Naess, Henryk Skolimowski, Vandana Shiva, Joanna Macy, Ellen La Conte, and Charlene Spretnak. But the mechanistic legacy does not fade easily and seems to inhabit and shape the mind-set of the world’s ruling elites. From there, as an ideology, it conditions and intellectually distorts, if not corrupts, policy and the education of the young.

2.

Plato and Aristotle both argued the superiority of mind over body. Plato assumed it as a given in all his works. He gave it special consideration in the *Phaedo* and further reinforced his argument in that work with his argument for the immortality of the soul in Book Ten of the *Republic*. Reading it, one gets a strong impression that for him the division of body and mind (or soul) is a dichotomous one. Mind, or soul, is the directive force for the body to such a degree that the body is relegated to a decidedly inferior status. The body is like a theater in which the mind or soul or spirit expresses its quest for ideal truth and justice. Aristotle forthrightly likens the rule of the mind over the body to the relation of master and slave. He discusses this in some detail in the first book of the *Politics*.

Augustine enters into a passionate description of his struggles with what he describes as “the flesh” in his *Confessions* which he wrote at the age of 40, looking back on his youth—his sinful youth as he would say of it. Sensual appetite, or what he called concupiscence, gripped him. He regarded his early life as immersed in lust and felt it as sin but could not rid himself of his desire. He eventually reached a point where he wrenched free as part of his conversion at the age of 33 to Christianity. He abandoned his mistress and henceforth embraced absolute chastity. He came to consider a man’s erection to be sinful if it did not take place under his conscious control. He regarded women as beings who can cause this sinful response in a man.

³ Scheler, M. 1981. *Man’s Place in Nature*. New York: Farrar, Straus and Giroux, 11th printing.

⁴ See especially his *Phenomenology of Perception*, written with Donald A. Landes. 2012. London: Routledge.

⁵ Abrams, D. 1997. *The Spell of the Sensuous: Perception and Language in a More-Than-Human-World*. New York: Vintage Books (1st Vintage Books edition).

They must therefore be closely controlled. He turned his back, as it were, on the body and saw it as a threat. His writings and his life as he described it have been enormously influential in the over-long ambivalent and harmful attitude of humans toward sexuality, women, nature and the body. Upon his conversion, Augustine gave his worldly goods to the poor. He became Bishop of Hippo (in present day Algeria) and held that post with courage for over 30 years until his death in 430 AD. He wrote voluminously, including his long and famous book, *The City of God*.

In 1967, a historian of the Western medieval period, focusing on its technology, Lynn Townsend White, Jr., wrote an essay that appeared in *Science* magazine under the title “The Historic Roots of our Ecologic Crisis”.⁶ It was very widely read and has become a classic. White poses the argument that Judeo-Christian theology was fundamentally exploitative of the natural world. He points out that the human relation with the natural environment was always a dynamic and interactive one, but that the Judeo-Christian approach to nature paved the way for the modern industrial treatment of nature as an object for control and resource extraction. This essay marked for me the beginning of my realization that we human beings are not “above” nature, but are interactively part of nature.

3.

Francis Bacon (1561–1626); Rene Descartes (1596–1650); and Isaac Newton (1642–1727) together span 150 years in which a great turning took place in what leading thinkers were thinking about nature, God, and the human world. They helped usher in a new paradigm that in some form is still very much with us, though it is gradually being replaced. Their view of nature as a machine; of God as remote and as external-to-the-world watchmaker; of “right reason” (Bacon’s formulation) and Descartes’ “cogito ergo sum” (I think therefore I am); of irreducible atoms; of nature stripped of secondary qualities; and of body as nature to be tricked and molded by the mind for purposes of endless progress introduced the new bourgeois middle classes of rising capitalists to a world seemingly made to order for exponential productive and commercial expansion. See Bacon’s *Valerius Terminus* (1603) and *Novum Organum* (1620); Descartes’ *Meditations on First Philosophy* (1641) and *Discourse on Method* (1637); and Newton’s *Principia* (1687).

4.

For me and for millions of people, Lincoln Barnett’s *The Universe and Dr. Einstein*, first published in 1957, was a memorable and liberating event. It not only gave us access to the way Einstein was configuring the universe but that what Einstein showed us was a truly exciting picture of a universe in which each of us participates in timespace. As I pondered this, and read other accounts and was introduced to quantum theory and its successors all the way to string theory, I felt a kind of mental seismic shift. We live in a rich, varied, diverse universe, open to change and experimental thought and action, and rife with diversity (even parallel universes

⁶ White, L. T. Jr. 1967. “The Historic Roots of Our Ecologic Crisis.” *Science*, Vol. 155, Number 3767, March 10, 1203–1207.

perhaps!). A much later work, Walter Isaacson's *Einstein, his Life and Universe* (2006) showed Einstein pressing ever onward for more accurate and satisfying (to him first of all) accounts of a dynamic universe. In the meantime I read with astonishment Stephen Hawking's *A Brief History of Time* (1988) and *A Briefer History of Time* (2005); and Carl Sagan's *Cosmos: A Personal Voyage* (1980); and then with growing wonder and awe Brian Greene's *Making Sense of String Theory*. I should mention that just a few years ago (2011), TIME, Inc. published a very readable, popular, and also substantive biography of *Albert Einstein: The Enduring Legacy of a Modern Genius*. Done by Richard Lacayo, Arthur Hochstein, and Dot McMahon, and others, it is worth reading—and more than once.

5.

Many thinkers have helped me understand and formulate the idea, contra the Newtonian world view, that we live in a relational and self-organizing universe and that we humans, in belonging to this universe, are characterized in our being by inherent relationship and self-organizing power. Even so, many post-Newtonians have assumed that the world, scientifically understood, is pretty much the way Newton and his heirs thought about it, but that they could offer a picture of life and the world from a human (and thus presumably a non-scientific) point of view. I see most Existentialism in that light as well as a great outpouring of humanist writings. The misleading and futile bifurcation of “hard science” and humanism is maintained in those works. How exciting and forward looking is the scientific and philosophic work of Ilya Prigogine, a Nobel Prize winner in chemistry in 1977. Encountering the world view of Newton directly, he dispels the myth of the separation between a scientifically understood nature and a non-scientific and “higher” human nature. For example, in the book *Order out of Chaos*, written with Isabelle Stengers, they wrote of life in general, that it

“is the outermost consequence of the occurrence of self-organizing processes, instead of being something outside nature's order . . . Earlier science [stemming from Newton] about a passive world belongs to the past . . . superseded by the internal development of science itself.”⁷

Humanism's demand for choice and freedom is answered in this “internal development of science itself.”

Inspired by Prigogine, Erich Jantz wrote *The Self-organizing Universe*⁸ in 1980. Fritjof Capra poses a similar approach, notably in *The Web of Life, a New Understanding of Living Systems* (1996).⁹ In the 1990's I delved into books by Danah Zohar, *The Quantum Self*, *The Quantum Society*, and *Rewiring the Corporate Brain*.

⁷ Prigogine, I., I. Stengers. 1984. *Order out of Chaos. Man's New Dialogue with Nature*. New York: Bantam Books, 172.

⁸ Jantz, E. 1980. *The Self-organizing Universe*. New York: Pergamon Press.

⁹ Capra, F. 1996. *The Web of Life, a New Understanding of Living Systems*. New York: Anchor Books.

Charlene Spretnak's books develop a similarly new and engaging world view, most recently in *Relational Reality* (2011). Ellen LaConte's recent book, *Life Rules: Nature's Blueprint for Surviving Economic and Environmental Collapse* (2012) aptly explores the seamless relationship that exists within nature between human and non-human systems. Thomas Berry, philosopher and widely revered Catholic priest (1914–2009), wrote an arresting book, *Twelve Principles for Understanding the Universe and the Role of Humanity in the Universe Process*. The first principle is consonant with what the forgoing authors advance. He writes, "The universe, the solar system, and planet Earth in themselves and in their evolutionary emergence constitute for the human community the primary mystery whence all things emerge into being." I've touched here on only some of the literature and philosophy in recent decades pointing to and developing a post-Newtonian understanding of nature, of the human in nature, and the human as active agent in our own evolution.

6.

Henryk Skolimowski is a pioneer of eco-philosophy. He has written a great number of provocative and insightful books. The one that inspires me most is his recent *The Lotus and the Mud: Autobiography of a Philosopher* (2011. Creative Fire Press). In this as in his other works he shows how deep in the evolutionary trajectory of the human species is the practice and the growing awareness of dialogue.

7.

There are now many books and research projects that explore and examine the interactive relationships and dialogic intimations that occur in non-human nature. Consider, for example, the pioneering on-the-ground research and writing of Jane Goodall. Two of her books were especially enlightening for me: *Reason for Hope, a Spiritual Journey*, with Phillip Berman (1999) and *Through a Window: 30 Years Observing the Gombe Chimpanzees* (1990).¹⁰

Building on Jane Goodall's theme of animal interactive communication and dialogic intimations, we have been treated with many books, articles, and research projects.

I rejoice to include: Andrew R. Halloran, *The Song of the Ape—Understanding the language of Chimpanzees*; Tim Flannery, *Here on Earth—A Natural History of the Plane*; John D. Barrow, *The Artful Universe Expanded*; and Neil Shubin, *The Universe Within—Discovering the Common History of Rocks, Planets, and People*.¹¹

¹⁰ Goodall, J., Ph. Berman. 1999. *Reason for Hope, a Spiritual Journey*. New York: Warner Books; Goodall, J. 1990. *Through a Window: 30 Years Observing the Gombe Chimpanzees*. London: Wiedenfeld and Nicolson, and Boston: Houghton Mifflin.

¹¹ Halloran, A. R. 2012. *The Song of the Ape—Understanding the Language of Chimpanzees*. New York: Martin's Press; Flannery, T. 2010. *Here on Earth—A Natural History of the Plane*. New York: Grove Press; Barrow, J. D. 2005. *The Artful Universe Expanded*. Oxford: Oxford University Press; Shubin, N. 2013. *The Universe within—Discovering the Common History of Rocks, Planets, and People*. New York: Pantheon Books.

8.

Conversations of a human being, or groups of human beings, with other-than-human-beings and with nature as a whole (or “the all” to choose different language) has encountered skepticism, dismissal, if not disdain from the creators and devoted followers of a mechanistic understanding of the world. But in the new science stemming from Einstein, quantum theorists, anthropologists, paleontologists, eco-philosophers, and feminist thinkers, there is growing scientific support for listening to, and acknowledging, the experiential claims of voices—ancient, modern, and contemporary—affirming a conversational initiative-and-response relationship with other-than-human-beings and with the universe as a whole. St. Francis’s claims to such conversations are being taken seriously, for example, an especially relevant and affecting one. There are a host of other examples. Poets like Emily Dickinson and Mary Oliver are just a few of the artistic voices expressing a conversational relation with nature. Jane Goodall, whose work has been noted earlier in this essay, was once asked whether she believed in God. Her response, quoted in the Wikipedia biography of her, was, “I don’t have any idea of who or what God is. But I do believe in some great spiritual power. I feel it particularly when I’m out in nature. It’s just something that’s bigger and stronger than what I am or what anybody is. I feel it. And it’s enough for me.”

9.

In *Maps of Time, an Introduction to Big History*, David Christian¹² details the long, boisterous, and also tortuous record of agrarian civilizations worldwide, capped by the emergence in the past several centuries of an equally if not even more problematic industrial civilization now spreading to the entire world. It is a record of sharp bifurcation of the few and the many, of top heavy elite structures, and of a steady and increasingly self-destructive assault on nature. Andrew Smookler addresses an additionally crucial factor reinforcing top heavy structures. He notes that one of the most potent forces pressing on rulers to over-tax and oppress the people of a tribe, or city-state, or nation is the constant threat—real or manufactured—of hostile forces and danger from without.¹³ I make the point that in this context, dialogue, though repeatedly attempted from time to time, is a frail force destined to be marginalized.

ABOUT THE AUTHOR — Professor Emeritus at Bowdoin College in Brunswick, Maine, USA, where he taught political philosophy and political science for thirty years. In 1984, he became active in Green Politics and is co-founder of the Green Party of the United States. He visited and traveled in Poland several times in the 1980s and wrote a

¹² Christian, D. 2004. *Maps of Time: An Introduction to Big History*. University of California Press (first paperback printing: 2005).

¹³ Smookler, A. B. 1984. *The Parable of the Tribes: the Problem of Power in Social Evolution*, University of California Press.

book about the Solidarity movement published in 1988, *Poland Challenges a Divided World*. His writings about Green politics includes *Against all Odds, the Green Transformation of American Politics* published in 1999. He founded and is editor of *Green Horizon Magazine*, an international journal. He has also co-founded a leading ecological education project in this home area of midcoast Maine, the Cathance River Education Alliance.