Satinder Dhiman · Joan Marques

Editors

Spirituality and Sustainability

New Horizons and Exemplary Approaches

With Foreword by Dr. Ian I. Mitroff

Springer

Spirituality and Sustainability

Satinder Dhiman · Joan Marques
Editors

Spirituality and Sustainability

New Horizons and Exemplary Approaches

Springer

Editors
Satinder Dhiman   Joan Marques
School of Business   School of Business
Woodbury University   Woodbury University
Burbank, CA   Burbank, CA
USA   USA

Foreword

"*Spirituality and Sustainability: New Horizons and Exemplary Approaches*" is to be applauded for its ambitious scope. It is must reading for anyone concerned with the environment.

Since I work in the philosophical tradition of pragmatism, let me note how the book is compatible with a pragmatist definition of truth: *Truth is that which makes a positive ethical difference in the quality of one's life*. Thus, according to pragmatism, no matter to which school of ethics one gives one's allegiance, truth, and ethics are inseparable. But so are truth and aesthetics since the word "quality" is a stand-in for aesthetics. If in addition one adds the word spirit, then the definition reads: *Truth is that which makes a positive ethical difference in the spirit and quality of one's life*. Thus, in pragmatism, "aesthetics," "ethics," "spirituality," and "truth" are inseparable. Thus, this book is in alignment with pragmatism.

But pragmatism goes even further. The seemingly simple, small word "makes" is all important. It says that in pragmatism, we don't have "truth" until we have the ethical implementation of our ideas. That is, until they make a positive difference. According to this severe criterion, this book urges (begs) us to make its propositions become true through their being implemented. In other words, it is a call to ethical action.

Notice also that while a pragmatist definition of truth is the product of Western thinking, it is not confined to it. It is perfectly compatible with and willing to learn from Eastern philosophy.

Let me approach the matter from another perspective as well. Russell L. Ackoff was the first to appropriate the word "mess" to stand for a *whole system* of problems that were so interdependent, and thus highly interconnected, such that one could not take any single problem out of the mess of which it was apart and attempt to study it independently of all the other problems to which it was connected without doing irreparable damage to the nature of the problem and the entire mess. In other words, there are no such things as independent, self-standing problems any longer, if there ever really were.

The point is, everywhere from which one approaches it, the environment is a mess. The thing that this book brings front and center is that spirituality is one of the prime components of all messes. This is certainly true of the environmental mess. But then so are ethics and philosophy.

The challenge with which we are left is that at the present we don't have an adequate ethics and philosophy to grapple with the environmental mess, but these essays are a promising start.

Oakland, USA   Ian I. Mitroff

Contents

Editors and Contributors

About the Editors

Satinder Dhiman Ph.D., Ed.D. currently serves as a professor of management and as the associate dean, chair, and director of the MBA Program at Woodbury University's School of Business in Burbank, California. Professor Dhiman has also served as the chair for a special MBA Program for Mercedes-Benz executives, China. He also serves as accreditation mentor and site visit team leader for the Accreditation Council for Business Schools and Programs (ACBSP) for various universities in America, Canada, Europe, and India. He has been recently elected as the president of International Chamber for Service Industry (ICSI), 2014–2016. *He has also completed advanced Executive Leadership Programs at Harvard, Stanford, and Wharton.*

Recipient of several national and international academic and professional honors, Dr. Dhiman won the Woodbury University Ambassador of the Year Award 2015; Steve Allen Excellence in Education Award in 2006, and the prestigious ACBSP International Teacher of the Year Award in 2004. In 2013, Dr. Dhiman was invited to be the opening speaker at the prestigious TEDx Conference @ College of the Canyons in Santa Clarita, Calif. He is the founder and director of Forever Fulfilled, a Los Angeles-based Wellbeing Consultancy that focuses on workplace wellness and self-leadership.

Dr. Dhiman's work has been published in multiple national and international journals, and he has authored, co-authored, and co-edited ten books on management and leadership during last 7 years. His current research on fulfillment, which is also the theme of his book, *Seven Habits of Highly Fulfilled People* (Personhood Press, CA, 2012/2014), is focused on transformative habits of mind for attaining lasting joy and fulfillment in both personal and professional life. In his most recent book, *Gandhi and Leadership* (Palgrave Macmillan, USA, 2015), Dr. Dhiman offers perceptive insights into the spiritual and moral mainstay of Gandhi's exemplary leadership and its abiding influence on the world today. e-mail: Satinder.Dhiman@woodbury.edu

Joan Marques Ph.D., Ed.D. serves as an assistant dean in School of Business, chair and director of the BBA Program, and is an associate professor of management. She holds a Ph.D. from Tilburg University, an Ed.D. from Pepperdine University's Graduate School of Education and Psychology, an MBA from Woodbury University, and a B.Sc. in business economics from MOC, Suriname. She also holds an AACSB Bridge to Business Post-Doctoral Certificate from Tulane University's Freeman School of Business.

Her teaching focuses on leadership and organizational behavior, and her research interests pertain to those areas with specific focus on workplace spirituality and awareness in management performance. She has written more than 150 scholarly papers and has been widely published in journals such as the *Journal of Business Ethics, the Journal of Management Development, Organization Development Journal*, *International Journal of Organizational Analysis, Development and Learning in Organizations, On the Horizon, Journal of Social Change, Human Resource Development Quarterly, Corporate Governance, Leadership and Organization Development Journal, Journal of Global Responsibility, Business and Society*, and others.

She has authored and co-authored 14 books, all of which are aimed at enhancing readers' awareness and improving the quality of their lives. A number of these books can be used as main or supplementary material in management and leadership courses or workshops, while the others are aimed at a broader audience. Her book *Leadership and Mindful Behavior: Action, Wakefulness, and Business (fall 2014: Palgrave Macmillan)* provides readers with guidelines for effective and perceptive leadership, and reviews the concepts of sleepwalking and wakefulness. Her most recent book, *Business and Buddhism (Routledge, 2015)*, explores the value of applying the positive psychology of Buddhism to work settings. e-mail: Joan.Marques@woodbury.edu

About the Foreword Author

Dr. Ian I. Mitroff Ph.D. is widely regarded as the founder of the discipline of crisis management. He specializes in crisis prevention, strategic planning, and the design of ethical work environments. Known for his thinking and writing on a wide range of business and societal issues, Dr. Mitroff has published nearly 400 papers and articles and 30 books, including *Swans, Swine, and Swindlers: Coping with the Growing Threat of Mega-Crises and Mega-Messes* and *Why Some Companies Emerge Stronger And Better From A Crisis*.

A pioneer in the field of spirituality in the workplace, Dr. Mitroff's book *Spiritual Audit of Corporate America* led to the genesis of a new field and still serves as a benchmark in this field. He is a frequent guest on national radio and television shows, including "Your Call" (National Public Radio), "Marketplace" (National Public Radio), "Window On Wall Street" (CNN Financial News), the "Dick Cavett Show" (CNBC, New York), and "Late Night America" (PBS TV).

Dr. Mitroff is a Professor Emeritus at the USC Marshall School of Business at the University of Southern California, an adjunct professor at Saybrook University, San Francisco, and an adjunct professor in the School of Public Health at St. Louis University. He is also a senior investigator at the Center for Catastrophic Risk Management at the University of California, Berkeley, and a member of the Board of Scientific Counselors for the Office of Public Health Preparedness and Response at the Centers for Disease Control and Prevention, US Department of Health and Human Services. He is the president and founder of Mitroff Crisis Management. e-mail: ianmitroff@earthlink.net

Contributors

John E. Carroll has served as a professor of environmental conservation at the University of New Hampshire for over four decades. In addition to focus on environmental and natural resource policy, domestic and international, and energy and agriculture, Prof. Carroll has taken a particular interest in ecological ethics and values, ecology, and spirituality. He has conducted research, taught and published on this subject for several decades. He has written pastoral letters on environment for both Catholic and Episcopal Bishops in the USA, has organized and taught both graduate and undergraduate university courses in ecological ethics and values, and he has authored/edited four books in this field: *Embracing Earth: Catholic Approaches to Ecology* (Orbis Books), *The Greening of Faith: God, the Environment and the Good Life* (University Press of New England), *Ecology and Religion: Scientists Speak* (Franciscan Press), and *Sustainability and Spirituality* (State University of New York Press). He resides in Durham, New Hampshire. e-mail: John.Carroll@unh.edu

Michael Carroll has over 25 years of business experience holding human resources executive positions with such firms as Bankers Trust Company, Shearson Lehman Brothers/American Express, Paine Webber, Simon & Schuster Publishing, and The Walt Disney Company. Michael Carroll is the author of *Awake at Work* and *The Mindful Leader*. He is now a consultant and coach whose client list includes Procter & Gamble, Starbucks, Unilever, and the National Board of Medical Examiners.

His recent Shambhala book, *Fearless at Work: Timeless Teachings for Awakening Confidence, Resilience, and Creativity in the Face of Life's Demands*, explains how the practice of mindfulness—full awareness of our moment-to-moment experience—can help us become more confident and open to possibility in our work life. e-mail: jhampa@comcast.net

Xenya Cherny-Scanlon serves as a special adviser to the Director General IUCN (International Union for Conservation of Nature) Geneva Area.

She is the founder of Green Stilettos and founder and author of www.greenstilettos.com blog on sustainable fashion, which seeks to "put glam into green."

Her specialty is sustainable luxury. Xenya is a communications professional with extensive international experience across three continents, an advanced university degree in international relations (with a major in public relations), and a thorough knowledge of global environmental and humanitarian issues. Working with major international organizations, she managed global media relations, coordinated high-profile communication initiatives, led multicultural teams at UN conferences, and reported for an international news agency. She also developed extensive writing and research experience in the field of sustainable luxury. In her current role, she is responsible for supporting the CEO of the world's oldest and largest environmental network on a wide range of management, policy, and communications issues. e-mail: xenya.cherny-scanlon@iucn.org

Elizabeth F.R. Gingerich J.D. is a professor of Business and International Law at Valparaiso University (VU), Valparaiso, Indiana, USA, and as formerly a senior partner with the law firm of Terrell & Thrall LLP. A practitioner for over 33 years, her primary fields of concentration include general trial litigation, commercial transactions, intellectual property, international law, tax, real estate, bankruptcy, business and estate planning, and employment law. She is a member of both the Indiana and Virginia State Bar Associations and maintains a limited practice in corporate law. Dr. Gingerich, Morgal Chair of Christian Business at VU, has been a guest speaker at national and international intellectual property conferences in both the USA and Brazil and in business sustainability in the UK, Mexico, and France. Her research in labor arbitration, climate change, campaign financing, and international trade has been published in highly respected, peer-reviewed journals. She serves as editor in chief of the international Journal of Values-Based Leadership, now in its 9th year of publication, and was co-founder of her university's multidisciplinary chapter of Engineers Without Borders, an award-winning organization which has successfully constructed water and irrigation systems in Kenya and Tanzania. e-mail: elizabeth.gingerich@valpo.edu

Dr. Dennis Heaton has areas of research interest include consciousness, holistic health, peak performance, and higher stages of human development and their implications for leadership. He serves as a professor of Management at Maharashi University of Management and director of the Ph.D. program in management. He has been directing Ph.D. students' research in areas of socially and environmentally responsible business, including the effects of green buildings on human resources, consumer attitudes toward genetically modified food, moral development and ethical decision-making in accountants, and the role of human resource management in implementing sustainability, eliminating poverty, and the financial impact of environmental management systems.

Dr. Heaton's professional life has been an integration of teaching, researching, and practicing management. He has served as dean of Distance Education and International Programs, establishing MUM programs around the globe. He has been honored for his teaching excellence with the 1995 Enlightened Educator award by the students of Maharishi University of Management.

Select Publications:

Heaton, D. & Travis, F. (2013). Consciousness, empathy, and the brain. In K. Pavlovich and K. Krahnke (Eds.), *Organizing through empathy*, pp. 17–33. Oxford, UK: Routledge.

Heaton, D., Travis, F. & Subramaniam, R. (2012). A Consciousness-Based approach to management education for inte grity. In C. Wankel and A. Stachowicz-Stanusch (Eds.), *Handbook of Research on Teaching Ethics in Business and Management Education*, pp. 66–79. Hershey PA: IGI Global.

Heaton, D. & Subramaniam, R. (2012). An Eastern approach to the global problem of corruptibility. In C. Wankel and S. Malleck (Eds.), *Ethical models and applications of globalization: Cultural, socio-political, and economic perspectives*, pp. 89–99. Hershey, PA: IGI Global.

Heaton, D. (2011). Transcendent experience and development of the post-representational Self. In A. Pfaffenberger, P. Marko, & Combs, A. (Eds.), *The postconventional personality: Perspectives on higher development*, pp. 175–188. Albany, NY: SUNY Press.

Heaton, D. (2011). Introduction to the volume. In D. Heaton, J. Schmidt-Wilk, & B. McCollum, (Eds.), *Consciousness-Based Education: A Foundation for Teaching and Learning in the Academic Disciplines, Volume 8. Consciousness-Based Education and Management*. Fairfield, IA: M.U.M. Press. e-mail: dheaton21@gmail.com

Annick de Witt Ph.D. is an author, change-maker, researcher, and consultant in the field of cultural and inner transformation for global sustainability. After researching worldviews and culture in an academic context for almost a decade, she now works with organizations to use these insights to leverage strategies, optimize communications, and foster more inclusive and creative strategy-development. She is also a guest researcher at the Biotechnology and Society section at the Delft University of Technology in the Netherlands. Annick has published widely, ranging from op-ed-articles to academic articles in journals such as *Ecological Economics, Environmental Science and Policy, Environmental Ethics,* the *Journal of Environmental Psychology,* and *Worldviews*. e-mail: A.deWitt@tudelft.nl

Dr. John Ikerd was a Professor Emeritus of Agricultural Economics, University of Missouri, and was raised on a small farm in southwest Missouri, and received his BS, MS, and Ph.D. degrees in agricultural economics from the University of Missouri. He worked in private industry for a time and spent thirty years in various professorial positions at North Carolina State University, Oklahoma State University, and University of Georgia, retiring from the University of Missouri in early 2000. Since retiring, he spends most of his time writing and speaking on

issues related to sustainability with an emphasis on economics and agriculture. He is the author of five published books, including *Essentials of Economic Sustainability; Sustainable Capitalism: A Matter of Common Sense; Small Farms are Real Farms: Sustaining People through Agriculture; Revolution of the Middle… Pursuit of Happiness; Return to Common Sense;* and *Crisis and Opportunity: Sustainability in American Agriculture.* His two free online books are linked to his university Web site: http://web.missouri.edu/ikerdj/. e-mail: jeikerd@gmail.com

Dr. Will McConnell serves as an assistant dean in College of Transdisciplinarity and chair in Interdisciplinary Studies Department. Professor McConnell is an interdisciplinary researcher in environmental sustainability issues. He combines a number of disciplinary perspectives in science, marine biology, environmental policy, psychology, philosophy, and ethics across disciplines to address issues in environmental sustainability. As an interdisciplinary researcher, Prof. McConnell investigates, and often interrogates, current (and long-standing) relations of disciplinary boundaries; current disciplinary knowledge production more often obscures rather than fosters solutions to the most pressing, intractable problems which deepen, rather than eliminates, environmental damage. His current research interests include marine-based policy (especially in developing and measuring the effectiveness of marine protected areas), socio-scientific framings of biodiversity issues, and, more recently, the impacts of global warming and anthropocentric pressures on coastal and ocean environments. e-mail: Will.McConnell@woodbury.edu

Dr. Raghavan (Ram) Ramanan Ph.D., PE, CEng. BCEE is a Fulbright Fellow with over 40 years of global corporate (ExxonMobil), consulting (AECOM, Trinity and ICF), and academic (Illinois Institute of Technology Business School and Indian Institute of Technology) experience in the management and evangelism/advocacy of corporate sustainability/social responsibility, environmental risk mitigation and compliance in over a dozen nations.

Ram currently serves as Affiliate Research Professor at the Desert Research Institute, the environmental research arm of the Nevada System of Higher Education.

Prior to serving at DRI, Ram was an industry associate professor at the Illinois Institute of Technology Stuart School of Business guiding industry-sponsored capstone projects and teaching corporate sustainability and social responsibility, ethics, environmental analytics, economics and finance, courses to over one hundred MBA, JD, and graduate students. Ram currently serves on the Editorial Review Board of the International Journal of Risk and Contingency Management. He also served as education council chair and director on the International Board of A&WMA.

Ram holds a Ph.D. from the University of Texas at Dallas, an MBA from the University of Texas at Austin, and a BS in chemical engineering from the Indian Institute of Technology. Ram has published and/or presented 40 papers worldwide.

Ram has co-authored a book "Environmental Ethics and Sustainability—A case book for Environmental Professionals" published by CRC Press/Taylor and Francis, July 2013. e-mail: ram.ramanan@fulbrightmail.org

Harold (Hal) Taback PE, BCEE, QEP, REA is president of Hal Taback Company of Carlsbad, California, a Southern California environmental consulting firm. After a 16 year career as a rocket designer, in the early 70s, he set out on career to support the US EPA and the Cal ARB who were in the process of quantifying emissions from industrial sources and establishing emission limits necessary to achieve satisfactory air quality and help the agencies determine that the emission limits were met. He has over 40 years of professional practice in regulatory and engineering issues related to reducing risk from toxic air pollutants and hazardous waste and other compliance. Mr. Taback holds a master of science in aerospace engineering from Princeton University and a bachelor of mechanical engineering from the University of Rochester. He has over 140 publications in the environmental field. His papers on ethics have been published in EM Magazine, Environmental Auditor, Engineering Times, and Southern California Environmental Digest. Hal is the co-author of Environmental Ethics and Sustainability: A Casebook for Environmental Professionals.

Jean Garner Stead and W. Edward Stead are both professors of Management at ETSU. Jean earned her BS and MA in Economics from Auburn University, her MBA from Western Illinois University, and her Ph.D. in business administration from LSU. Ed earned his BS and MBA from Auburn University and his Ph.D. in from LSU.

Ed and Jean have researched and written extensively together for more than 30 years, and their work has been well received and well cited by their colleagues in their field. Their book, Management for a Small Planet, is now in its third edition (1992, 1996, 2009), and it received an American Library Association Choice Outstanding Academic Book Award in 1992. Their 1990 Journal of Business Ethics (JBE) article (with Dan L. Worrell), "An Integrative Model for Understanding and Managing Ethical Behavior in Business Organizations," was recently designated a citation classic by the Social Science Citation Index; it is the 18th most oft-cited article in the 30-year history of the JBE. This summer, the second edition of their book, Sustainable Strategic Management (2004 and 2014) was published, and they have had two refereed journal articles published/accepted.

Jean and Ed are both very active in the Academy of Management (AOM), the largest and most prestigious professional association for management scholars. They are both founding members and former officers of the Organization and Natural Environment Division of the AOM, they have both served in several capacities in the Social Issues Division of the AOM, and Ed has served on the AOM Program Committee and Ethics Committee. At ETSU, Jean has received the College of Business Teaching Award several times, the College of Business Teaching Emeritus Award, and the University Teaching Award. Ed has received the College of Business Teaching and Research Awards, and he has been nominated twice for

the University Research Award. Jean and Ed both serve on the Melting Pot Ministry Team of Munsey Methodist Church, which serves the homeless and hungry in the downtown community of Johnson City, TN. e-mail: STEADE@mail.etsu.edu

Rohana Ulluwishewa Ph.D. has served as an associate professor at the Sri Jayewardenepura University in Sri Lanka. After gaining a M.Sc. from the London School of Economics, UK, he completed his Ph.D. at Kyushu University, Japan. In his thirty years of academic career, he has worked as a senior lecturer at the University of Brunei and was a visiting fellow at Wageningen Agricultural University and Leiden University in the Netherlands, and at Leeds University, UK. He served as a consultant for many national and international development agencies and has published in numerous international journals. He was also an honorary research associate at Massey University in New Zealand, where he currently lives. His book "*Spirituality and Sustainable Development*" (Palgrave, 2014) was honored as a finalist in the 2014 International Book Award. e-mail: ulluwishewa@xtra.co.nz

The Case for Eco-spirituality: Everybody Can Do Something

Satinder Dhiman

> *Future generations? Why should I care about future genera-*
> *tions? What have they ever done for me?*
>
> —Groucho Marx

> *A Man came into a Wood one day with an axe in his hand and*
> *begged all the Trees to give him a small branch which he*
> *wanted for a particular purpose. The Trees were good-natured*
> *and gave him one of their branches. What did the Man do but*
> *fix it into the axe head, and soon set to work cutting down tree*
> *after tree. Then the Trees saw how foolish they had been in*
> *giving their enemy the means of destroying themselves.*
> —*Aesop's Fables*. (A new translation by Laura Gibbs. Oxford
> University Press, World's Classics: Oxford, 2008)

Abstract

Have contemporary approaches to economic and social development failed to address what many believe to be humankind's abiding need for spiritual growth? Can material advancement be more sustainable when spiritual development is seen as an integral part of the human development algorithm? Since our societies are human nature writ large, can it be argued that the solution to many of the current challenges faced by both the civilization and the environment lies in connecting sustainable practices with our spiritual awareness? While arguments can be made that the choice we face is between conscious change and chaotic annihilation, could each one of us begin to make a difference by integrating spirituality and sustainability as a way of life? This introductory chapter relies on the spiritual power of individuals to heal themselves and the environment. When we change our orientation from 'I' to "We," we transition from *ill*ness to *well*ness—*individually* and *collectively*. Accordingly, sustainability is no longer seen just as a scientific or political problem; it becomes a matter of individual moral choice, with profound spiritual significance.

S. Dhiman (✉)
Woodbury University, Burbank, USA
e-mail: satinder.dhiman@woodbury.edu

Conquest and Control: Disempowering Approaches

> A Man and a Lion were discussing the relative strength of men and lions in general. The Man contended that he and his fellows were stronger than lions by reason of their greater intelligence. "Come now with me," he cried, "and I will soon prove that I am right." So he took him into the public gardens and showed him a statue of Hercules overcoming the Lion and tearing his mouth in two.
>
> "That is all very well," said the Lion, "but proves nothing, for it was a man who made the statue."[1]

Ever since the dawn of Industrial Revolution, our primary approach toward nature has consistently been that of the conquest and control rather than harmony and coexistence. The horrific consequences of this disempowering stance are too evident to recount. We believe that the most important eco-spirituality struggles will be won or lost during the current and the next decade. While the policy makers and governments can play their respective role, each one of us has to consciously adopt spirituality and sustainability as a way of life. Only an individual life rooted in the continuous harmony with nature—a life based on moral and spiritual awareness—can preserve the sanctity of the planet in the long run. When we change our orientation from "self-centeredness" to "other-centeredness and nature-centeredness," we transition from *illness* to *wellness*—individually and collectively.

Sensitive minds have always recognized that the most important issues confronting organizations and society at large are so profound and pervasive that they can only be resolved at the fundamental level of the human spirit—at the level of one's authentic self. The following chapters will share the working hypothesis that wisdom, compassion, abundance, equity, equality, contribution, synergy, wakefulness, selflessness, and happiness can serve as the key drivers in healing our planet through spirituality.

Sustainability and Spirituality: An Interdisciplinary Approach

This book approaches the topic of sustainability in a broad interdisciplinary fashion—in the possible manner of our *total footprint* on the planet, not just our *carbon footprint*. It proposes to bring together the two allied areas of sustainability and spirituality in a dialectical manner, with ethics acting as a balancing force and spirituality playing the role of the proverbial invisible hand guiding our quest for

---

[1]Source: *Aesop's Fables*. A new translation by Laura Gibbs. Oxford University Press, World's Classics: Oxford, 2008. Moral of Aesop's Fable: We can easily represent things as we wish them to be.

sustainability. It takes the view that, in essence, spirituality and sustainability are vitally interlinked and that *there is no sustainability without spirituality.*

We believe that the broad interdisciplinary approach proposed in this book is critical in addressing the multifaceted issues of environmental sustainability and in mapping our plenary future. We propose to integrate a number of disciplinary perspectives in science, marine biology, energy harvesting and conservation, environmental policy, cultural studies, psychology, philosophy, spirituality, socio-scientific framings of biodiversity issues, ecological economics and ethics across disciplines to address the environmental sustainability issues. As interdisciplinary researchers, we propose to re-examine the current (and long-standing) relations of disciplinary boundaries. We believe that the current disciplinary knowledge production more often obscures rather than fosters solutions to the most pressing, intractable problems which deepen, rather than eliminate, the environmental damage.

Everybody Can Do Something

This book explores the inherent relationship between sustainability and spirituality, and the role of ethical leadership in honoring and maintaining this interconnectedness. We believe that unless people's moral and spiritual qualities are nurtured and developed, the best of sustainability efforts will not work. Our political and economic thinking needs to be attuned to spirituality rather than materialism, for no economics is any good that does not make sense in terms of our shared humanity and morality. We need to refuse to treat economics and politics as if people do not matter. After all, we are "Homo moralis" and not "Homo economicus." We believe that the way to achieve sustainable, harmonious living in all spheres is through *lived* morality and spirituality at the personal level.

Likewise at the managerial level, we need to start viewing our organizations as "living systems" rather than as "machines for producing money."[2] Research shows that long-lived companies are supremely sensitive to their environment. Thus, true sustainability is not possible without a deep change of *values* and commitment to a *lifestyle* at the *individual* and *organizational* level. It cannot be achieved simply as an expression of economic functionality or legislative contrivance. Therefore, to the question, "How to improve the state of the Planet?" we reply: "Everybody can do something!"[3]

---

[2]Arie de Gues, *The Living Company: Habits for Survival in a Turbulent Business Environment* (Boston, MA: Harvard Business Review Press, 2002), 91, 176.

[3]David Biello, State of the Earth: Still Seeking Plan A for Sustainability? How to improve the state of the planet: "everybody can do something." *Scientific American*, Oct. 12, 2012. Retrieved July 31, 2015: http://www.scientificamerican.com/book/planet-seeks-plan-for-sustainability/.

When everyone contributes their respective share in the cosmic scheme of things, it unexpectedly brings about the intended change in the entire world. The task may appear to be daunting at first, as the following story[4] illustrates, but it can only start one step at a time.

Saving the world, one starfish at time!

Once thousands of starfish got washed to the shore and due to lack of water they were almost dying. One person, who was taking a stroll along the beach, noticed this. Out of compassion, he picked them up one at a time and started throwing back into the ocean so that it can survive.

A passerby saw this and remarked, "But, sir, don't you realize there are miles and miles of beach and starfish all along it! You can't possibly save them all, you can't even save one-tenth of them.

In response, the person picked up another starfish and threw it back into the sea and said – "Well, it made a difference for that one!"

The story brings home an important point: Do what you can to make a change and leave the rest to higher intelligence. If we want the universe to be a better, a safer place, then we all have to work together for it by inspiring others by way of example.

Defining Sustainability

Definitions of sustainability abound. The most frequently quoted definition is from *Our Common Future*, also known as the Brundtland Report, published in 1987 by the United Nations' World Commission on Environment and Development: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[5]

---

[4]Attributed to Loren Eiseley. Retrieved December 2, 2015: https://www.goodreads.com/author/quotes/56782.Loren_Eiseley.

[5]For further details, see the Report of the World Commission on Environment and Development: *Our Common Future*. Retrieved August 20, 2015: http://www.un-documents.net/our-common-future.pdf.

There has been a growing realization in national governments and multifaceted institutions that it is impossible to separate economic development issues from environment issues. For example, poverty is the major cause as well as effect of global environmental problems. It is therefore futile to attempt to deal with environmental problems without a broader perspective that encompasses the factors underlying world poverty and international inequality.[6]

In simple terms, sustainability means utilizing natural resources in manner that we do not end up, during the process, destroying the setup. In its most practical aspect, sustainability is about understanding the interconnections among environment, society, and economy. According to US Environmental Protection Agency (EPA), "Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations."[7]

Need for Spiritual Transformation

Our premise in this book is that in order for sustainability to be sustainable, a profound spiritual transformation has to take place, root branch and all, at the individual level. Our experience with various forms of political governments and legislative laws have taught us that such mechanisms are only as good as the individual and that constitutions are nothing but human nature writ at large. While various social and political initiatives for sustainability are welcome, one cannot really enact sustainability into legislative laws. Something has to change fundamentally at the level of a common person in the street. Unless our sustainability efforts are informed by a clear understanding of the spiritual nature of all existence, they will not get beyond mere cosmetic quick fixes.

Accordingly, a spiritual transformation is necessary in terms of how we view and live our lives as members of the society. It entails asking some tough questions: Do we approach our life as a gift of nature or as a personal entitlement? Do we want to befriend nature or conquer nature? How do we look at our *total* footprint, and not just *carbon* footprint? We have to start at the very beginning, right at the point of our ends and goals that we pursue that in turn determine our needs and wants. While we are all born as consumers, true to our self-preservation instinct, becoming a contributor takes a certain measure of objectivity and maturation.

---

[6]Ibid, p. 12.

[7]What is Sustainability? United States Environmental Protection Agency. Retrieved August 20, 2015: http://www.epa.gov/sustainability/basicinfo.htm.

Philosophy of Universalism

In these two opening chapters, we will approach the issue of spirituality–sustainability from the standpoint of the Vedas (particularly *Upaniṣads)* and the Bhagavad Gītā. The Vedas are the source books of India's spiritual wisdom. They are revealed scriptures[8] that propound the principle of oneness and unity of the ultimate reality (*Brahman*) with our innermost self (*Ātman*). A scripture is a text that has a universal message of lasting value.[9] Huston Smith, the great American scholar of comparative religion, speaks about the importance of approaching scriptural teachings with a certain preparation and orientation to imbibe their subtle truth as follows:

> Scripture is merely a key to the infinite storehouse of knowledge that lies within every human soul. And as for philosophy, its object is to enable the student to see the Truth—to realize it in direct experience. Hence certain moral and spiritual disciplines are necessary in order to create the right mood for study of both philosophy and the scriptures. Hinduism lays down such disciplines: discrimination between the Real and the unreal and renunciation of the unreal; and acquisition of the six virtues (control of the mind, control of the senses, restraining the mind from being distracted by worldly objects, faith in the scriptures and the words of the teacher, mental concentration, and lastly, the longing for liberation). Inwardness of spirit, cultivated through self-control and contemplation, enables the student of the scriptures to grasp their subtle meaning, which otherwise remains hidden from the merely intelligent reader.[10]

The purpose of all the great scriptures of the world is to teach "right knowledge" flowering into "right conduct." "The goal of spiritual life," says Huston Smith elsewhere, "is not altered states, but altered traits."[11] It starts with our moral responsibility. The very first word of the Gītā is *dharma* (moral duty) and the last word is *mama* (my or mine). Literally, therefore, the first and last words of the Gītā denote "my moral duty," my *dharma*.

The Gītā begins with the most fundamental leadership question: What is the right thing for me to do in any given situation? *Dharma* is the province of the entire Gītā! The Gītā (chapter 1, verse 1, hereafter BG 1.1) begins with word *dharmakṣetrekurukṣetre: kurukṣetre* literally means "the field of actions" and *dharmakṣetre* means "that field of moral order which sustains everything." So, the Gītā deals with the domain of our actions, actions guided by the moral law or principle that sustains everything within the cosmic sphere. In order to understand the true

---

[8]The Sanskrit word for scripture is "*Shastra*:" *Shasti ca trayate ca iti shastram*: That which rules and protects is a *shastra*.

[9]Swami Dayananda Saraswati, *Bhagavad Gita: Home Study Course* (Chennai: Arsha Vidya Research and Publication Trust, 2011), Multimedia edition, vol. 2, p. 1077. From Essay, "Why study the Gita," by Swami Dayananda Saraswati. Retrieved July 25, 2015: http://www.arshavidya.org/Study-Gita.html.

[10]Foreword by Huston Smith. In Winthrop Sargeant, trans., *The Bhagavad Gītā,* 25th Anniversary Edition (Albany, New York: State Press of New York Press, 2009), 12.

[11]Huston Smith, "Encountering God." In Huston Smith, Phil Cousineau, *The Way Things Are: Conversations With Huston Smith on the Spiritual Life* (Oakland, California: University of California Press, 2003), 97.

import of the message of the Gītā, it is very important to understand the correct meaning of the word "*dharma*."

Understanding Dharma, *ṛtaṃ*, the Cosmic Order

Dharma is the most important and pivotal concept in the spiritual tradition of India. Etymologically, the word *dharma* comes from the root *dhṛ* which means "to bear, to support, to uphold,"—*dhārayate uddhāryateva iti dharma*—that which "supports, sustains, and uplifts" is *dharma*. There is another Vedic concept which is closely related to *dharma*, called *ṛta*. *Ṛta* is the *order* behind the manifest world, the harmony among all aspects of manifestation, each of which obeys its own truth, scale and order. There is physical order, biological order, and psychological order.

Everything in the universe follows its own inner order, *ṛtaṃ*. Actually, *dharma* is conceived as an immanent aspect of *Ṛta*. As John Warne explains in his editorial preface to *Taittirīya Upaniṣad*, "*Ṛta* is the universal norm identified with truth which, when brought to the level of humanity, become known as *dharma*, the righteous order here on earth."[12] Indian seers and sages maintain that one should fulfill one's desires (*kāma*) or pursue wealth and security (*artha*) within the framework of *dharma*, which ensures the good of everyone.[13]

In Indian philosophy and religion, *dharma*[14] has multiple meanings such as religion, duty, virtue, moral order, righteousness, law, intrinsic nature, cosmic order, and nonviolence (*ahiṃsā paramo dharmaḥ*[15]). *Dharma* also means the invariable, intrinsic nature of a thing (*svadharma*) from which it cannot deviate, like there cannot be a cold fire. In the realm of ethics and spirituality, *dharma* denotes

---

[12]See: *Taittirīya Upaniṣad* by Swami Dayananda Saraswati (Saylorsburg, Pennsylvania: Arsha Vidya Gurukulum, 2005), transcribed and edited by John Warne, iv.

[13]Bangalore Kuppuswamy, *Dharma and Society: A Study in Social Values* (Columbia, Mo: South Asia Books, 1977).

[14]There is no single word in any Western language that can capture the multiple dimensions and subtle nuances of the word *dharma*. Like the words *karma* and *yoga*, it has been left untranslated in this chapter for the most part, with its contextual meaning presented in the parentheses where necessary. These words have found wide currency and familiarity in the Western culture. Similar confusion also exists regarding the meaning of the word *yoga*, as used in the Bhagavad Gītā. According to the preeminent Sanskrit scholar, J.A.B. van Buitenen, "The word *yoga* and cognates of it occur close to 150 times in the Gītā, and it needs attention." See: J.A.B. van Buitenen, ed. and trans., *The Bhagavad Gītā in the Mahābhārata: A Bilingual Edition* (Chicago: University of Chicago Press, 1981), p. 17. Etymologically, the word *yoga* comes from the Sanskrit root "*yuj*," which is cognate with the word "yoke." The *yoga*, "yoking," that is intended in the Gītā is the union of individual self, *jivātmā*, with the Supreme Self, *Paramātmā*.

[15]   *ahiṃsā paramo dharmaḥ, ahiṃsā paramo tapaḥ|*
        ahiṃsā paramo satyaṃ yato dharmaḥ pravartate||
        ahiṃsā paramo dharmaḥ, ahiṃsā paramo damaḥ|
        ahiṃsā parama dānaṃ, ahiṃsā parama tapaḥ||
        ahiṃsā parama yajñaḥ ahiṃsā paramo phalam|
        ahiṃsā paramaṃ mitraḥ ahiṃsā paramaṃ sukham||
                    ∼*Mahābhārata/Anuśāsana Parva* (115-23/116-28-29)

conduct that is in accord with the cosmic order, the order that makes life and creation possible. When our actions are in harmony with the cosmic order, *Ṛta*, and in accord with the dictates of inner law of our being, *dharma,* they are naturally and spontaneously good and sustaining. Alexander Pope was right: "He can't be wrong, whose life is in the right."

The Context: The Current State of the Planet

> Human activities are changing the climate in dangerous ways. Levels of carbon dioxide which heat up our atmosphere are higher than they have been in 800,000 years. 2014 was planet's warmest year on record. And we have been setting several records in terms of warmest years over the last decade. One year does not make a trend but 14 out of 15 warmest years on record have fallen within the first 15 years of this century.
>
>   Climate change is no longer just about the future we are predicting for our children or grandchildren. It is about the reality we are living with every day, right now. While we cannot say any single weather event is entirely caused by climate change, we have seen stronger storms, deeper droughts, longer wild fire seasons. Shrinking ice caps forced National Geographic to make the biggest change in its atlas since the Soviet Union broke apart.[16]

Environmentalists continue to point out that the current state of our planet is alarming—from the standpoint of economic development, social justice, or the global environment—and that sustainable development has hardly moved beyond rhetoric since it was first used in the 1980s. It is fairly evident to anyone who has a nodding acquaintance with the world affairs that humanity is hardly closer to eradicating extreme poverty, respecting the dignity and rights of all peoples or resolving environmental challenges, climate change or the extinction of plants and animals.[17] And to add insult to the injury, strangely, we find ourselves in an era of "sustainababble" marked by wildly proliferating claims of sustainability. Even as adjectives such as "low-carbon," "climate-neutral," "environment-friendly," and "green" abound, there is a remarkable absence of meaningful tests for whether particular governmental and corporate actions actually merit such description.[18]

For many experts, the increasing level of carbon dioxide in the environment is the most worrisome. The Emissions Database for Global Atmospheric Research, EDGAR, a database created by European Commission and Netherlands Environmental Assessment Agency, released its recent estimates, providing global past and present-day anthropogenic emissions of greenhouse gases and air pollutants by

---

[16]Climate Change and President Obama's Action Plan. Video retrieved on August 3, 2015: https://www.youtube.com/watch?t=182&v=r4lTx56WBv0.

[17]David Biello, State of the Earth: Still Seeking Plan A for Sustainability?

[18]Robert Engelman cited in Michael Renner, "The Seeds of Modern Threats," in *World Watch Institute State of the World 2015*: *Confronting Hidden Threats to Sustainability* (Washington, DC: Island Press, 2013), 2.

country. According to these estimates, USA has the second highest CO_2 emissions, trailing behind China, and one of the highest CO_2 emissions per capita.[19]

According to a recent report by NASA, "Despite increasing awareness of climate change, our emissions of greenhouse gases continue on a relentless rise. In 2013, the daily level of carbon dioxide in the atmosphere surpassed 400 parts per million for the first time in human history. The last time levels were that high was about three to five million years ago, during the Pliocene era."[20]

This alarming situation calls for creative solutions at both the collective and the individual level. At the same time, we cannot wait for and rely on legislative measures alone; something fundamental needs to change in terms of how we live and view the world. According to the NASA report, responding to climate change involves a two-pronged approach involving mitigation and adaptation:

1. Reducing emissions of and stabilizing the levels of heat-trapping greenhouse gases in the atmosphere ("mitigation");
2. Adapting to the climate change ("adaptation").[21]

The spiritual traditions of the world also offer some practical solutions. The Theravada Buddhist monk, Ven. Bhikkhu Bodhi, underscores the environmental urgency and suggests an effective solution:

> Today we face not merely a climate emergency but a single multidimensional crisis whose diverse facets—environmental, social, political, and economic—intersect and reinforce each other with dizzying complexity. …The realization that human activity is altering the earth's climate assigns to human beings the gravest moral responsibility we have ever faced. *It puts the destiny of the planet squarely in our own hands* just at a time when we are inflicting near-lethal wounds on its surface and seas and instigating what has been called "the sixth great extinction."[22]

It is believed that the five mass extinctions recorded in the last six hundred million years were precipitated by natural causes. According to some scientists, we may have just one more generation before everything collapses. In fact, in a recently published research article titled *Accelerated modern human–induced species losses: Entering the sixth mass extinction*,[23] Ceballos et al. state, unequivocally, that the planet has officially entered its sixth mass extinction event. The study

---

[19]EDGAR: Trends in global CO_2 emissions: 2014 report. Retrieved August 1, 2015: http://edgar.jrc.ec.europa.eu/news_docs/jrc-2014-trends-in-global-co2-emissions-2014-report-93171.pdf.

[20]NASA: *Global Climate Change: Vital Signs of the Planet*. Retrieved August 19, 2015: http://climate.nasa.gov/solutions/adaptation-mitigation/.

[21]Ibid.

[22]Ven. Bhikkhu Bodhi, Climate Change as a Moral Call to Social Transformation. The Buddhist Global Relief. Retrieved January 28, 2016: http://buddhistglobalrelief.me/2015/12/02/climate-change-as-a-moral-call-to-social-transformation/ [emphasis added].

[23]Gerardo Ceballos, Paul R. Ehrlich, Anthony D. Barnosky, Andrés García, Robert M. Pringle, Todd M. Palmer, "Accelerated modern human-induced species losses: Entering the sixth mass extinction," *Environmental Sciences* June, 19, 2015, 1–5. Retrieved July 10, 2015: http://advances.sciencemag.org/content/advances/1/5/e1400253.full.pdf.

shows that species are already being killed off at rates much faster than they were during the other five extinction events, and warns ominously that humans could very likely be among the first wave of species to go extinct.[24]

Real Ecology: Rub Not and Be Not Rubbed

In his masterly essay entitled *Ecology and the Bhagavad Gītā*, Swami Dayananda Saraswati, a preeminent Vedantic scholar and teacher, opines that the real ecology means learning to avoid rubbing against the environment.[25] This requires living in harmony with the whole environment, nurturing reverence for life by treating all life as sacred, and developing "big picture awareness"—a cosmic vision where our environment extends from our neighborhoods to the state, the country, the continent, the globe, the galaxy, and the universe.

This vision calls for a certain awareness and a worldview that is predicated on our understanding of the universe as being a manifestation of the transcendent Divinity. The Bhagavad Gītā and the Upaniṣads regard this entire world, *jagat*, as the manifestation of the Lord. This thinking invests all existence with a deeper moral basis and a higher spiritual significance. When this vision dawns, we understand the true meaning of such terms as compassion, contribution, and harmony.

A Case in Point: Crown of Creation or Bane of Creation?
"If all the insects were to disappear from the earth, within 50 years all life on earth would end. If all human beings disappeared from the earth, within 50 years all forms of life would flourish."[26]

As humans we always pride ourselves to be the crown of creation, as the most evolved of all creatures. Let's say, somehow, chimpanzees come to know about this contention. They will probably say, 'If being evolved means destroying our own kind, mindlessly plundering the planet, and upsetting the very setup that supports us, we are happy being the less evolved species.'

Objective analysis and a little reflection tell us that the universe was not created for humans alone. In the grand scheme of things, all forms of life are equally precious and so are their needs. The bounties of the planet are meant for all species to share equally since the earth belongs to all. And let's not forget

---

[24]For further details, also see: Dahr Jamail, Mass Extinction: It's the End of the World as We Know It. Retrieved July 10, 2015: http://www.truth-out.org/news/item/31661-mass-extinction-it-s-the-end-of-the-world-as-we-know-it.

[25]Swami Dayananda Saraswati, *Ecology and the Bhagavad Gītā*. Retrieved October 15, 2015: http://www.avgsatsang.org/hhpsds/pdf/Ecology_and_Bhagavad_Gita.pdf.

[26]A quote widely attributable to Jonas Salk. Sir Ken Robinson in his famous 2006 Ted talk titled "Do Schools Kill Creativity," also attributes it to Jonas Salk. Transcript retrieved September 10, 2015: http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity/transcript?language=en.

that rest of the creation does not take without first contributing their share. The bee that robs the flower fertilizes it too. One wonders how we the humans have come to regard ourselves to be an exception to this universal rule.

A coconut plant, when young, can sustain on just waste water during initial years. After 5–6 years, it develops the ability to offer nutritiously sweet water. It carries that sweet water, safely stored in a shell over its head, as its gift to the universe, faithfully offering 50–75 coconuts for the next 50–60 years. Consider a tree: every part of its existence is useful to the universe. World's forests, acting as green lungs, absorb almost 40 % of man-made CO_2, according to a 2011 University of Leeds research.

It is a matter of great disgrace that as humans we have come to be the least sustainable of all species to be called the "Crown of Creation?" In view of the opening quote ("If all the worms were to disappear…) and considering our eco-record, perhaps, "Bane of Creation" may be a more fitting epithet for humanity.

*As the intelligent members of the bio family, we should be the caretakers of planet's resources and its infrastructure. Based on all the available evidence regarding how human activities are affecting the climate in dangerous ways, it becomes evident how careless we have been in discharging our duties as caretakers. One of the cardinal principles of sustainability is that we should not **upset** the very **setup** carelessly in the process of meeting our needs. As the opening Aesop's fable indicates, one understands how we acquired the dubious skill of cutting the very branch on which we are sitting!*

Our dignity as humans should lie in protecting those who are weaker than us. Those who have more power ought to be more kind to those who are weak.

Reflection: Points to Ponder

1. How have we come to be in an adversarial relationship with Mother Nature?
2. Do you agree with the opening quote attributable to Jonas Salk?
3. As intelligent beings, do you believe that it is our bounden duty to act as caretakers of the planet's precious resources?
4. In some ancient cultures, there was a custom to plant five trees for every tree that was cut for timber. Learning from this custom, how can we ensure that we contribute to the well-being of planet at least equal to what we plan to consume?
5. Is it more gratifying to enjoy the satisfaction of a contented mind or to constantly want more—a more expensive car, name-brand clothes, or a luxurious house? How can we overcome this syndrome of "more-ism?"

Some Good News About Climate Change Adaptability

While climate change is a global issue, it is felt on a local scale. In the absence of national or international climate policy direction, cities and local communities around the world have been focusing on solving their own climate problems. They are working to build flood defenses, plan for heat waves and higher temperatures, install water-permeable pavements to better deal with floods and storm water, and improve water storage and use.

According to the 2014 report on Climate Change Impacts, Adaptation, and Vulnerability from the United Nations Intergovernmental Panel on Climate Change, governments at various levels are also getting better at adaptation. Climate change is starting to be factored into a variety of development plans: How to manage the increasingly extreme disasters we are seeing and their associated risks, how to protect coastlines and deal with sea-level encroachment, how to best manage land and forests, how to deal with and plan for reduced water availability, how to develop resilient crop varieties, and how to protect energy and public infrastructure.[27]

On August 3, 2015, President Obama and EPA announced the Clean Power Plan—a historic and important step in reducing carbon pollution from power plants that takes real action on climate change. With strong but achievable standards for power plants, and customized goals for states to cut the carbon pollution that is driving climate change, the Clean Power Plan provides national consistency, accountability, and a level playing field while reflecting each state's energy mix. It also shows the world that the USA is committed to leading global efforts to address climate change.[28]

On June 18, 2015, Pope Francis officially issued 184-page encyclical *Laudato si',* Italian for "*Praise Be to You.*" Subtitled as *On Care for Our Common Home*, it is a new appeal from Pope Francis addressed to "every person living on this planet" for an inclusive dialog about how we are shaping the future of our planet. As Yardley and Goldstein review in the *New York Times*, the encyclical boldly calls for:

> …a radical transformation of politics, economics and individual lifestyles to confront environmental degradation and climate change, blending a biting critique of consumerism and irresponsible development with a plea for swift and unified global action.[29]

Undoubtedly, Pope Francis "Laudato Si" is one of the most compelling moral testaments to appear in this century, a bold statement indeed that ventures to tie environmental degradation, poverty, and mindless consumerism to the heartless

---

[27]NASA: *Global Climate Change: Vital Signs of the Planet*. Retrieved August 19, 2015: http://climate.nasa.gov/solutions/adaptation-mitigation/.

[28]Clean Power Plan for Existing Power Plants. Retrieved September 1, 2015: http://www2.epa.gov/cleanpowerplan/clean-power-plan-existing-power-plants.

[29]Jim Yardley and Laurie Goodstein "Pope Francis, in Sweeping Encyclical, Calls for Swift Action on Climate Change." *The New York Times*. 18 June 2015.

greed of global capitalism. No wonder, it has found resonance with Buddhists, Hindus, with Jews, Muslims, Protestant, and Orthodox Christians; as well as with atheists and agnostics.

Eco-spirituality

Eco-spirituality is based on a fundamental belief in the sacredness of nature, Earth, and the universe. From the eco-spiritual perspective, Ultimate Reality (God, Spirit, Brahman, or the Divine) is not just the source of creation, it is also an integral part of the creation (*abhinna-nimita-upādān kāranam*). It is the maker and material both. The three fundamental entities—the individual, the world, and the Common Creator—are single unitary movement, inseparably intertwined and interdependent.

Thich Nhat Hanh, a Vietanamese Buddhist monk whom Martin Luther King, Jr. nominated for Nobel Peace Prize, has coined the word "interbeing" to represent the mutual interdependence of all existence. In his talks and seminars, Thich Nhat Hanh usually underscores the principle of "interbeing" by inviting his audience to look deeply at a piece of paper:

> If you are a poet, you will see clearly that there is a cloud floating in this sheet of paper. Without a cloud, there will be no rain; without rain, the trees cannot grow; without trees we cannot make paper….If we look into this sheet of paper even more deeply, we can see sunshine in it. If the sunshine is not there, the forest cannot grow….And if we continue to look, we can see the logger who cut the trees and brought it to the mill to transform into paper….When we look in this way, we see that without all of these things, the sheet of paper cannot exist….This sheet of paper is, because everything is….As thin as this sheet of paper is, it contains everything in the universe in it.[30]

This understanding of the *interbeing* nature of all things lies at the heart of eco-spirituality and sustainability.

Albert Schweitzer: Reverence for Life

Deeply influenced by Indian religious thought, Albert Schweitzer (1875–1965), a Christian theologian, organist, philosopher, physician, and medical missionary, developed his doctrine of "reverence for life," for which he was awarded the Nobel Peace Prize in 1952. He considered this principle both a universal frame of ethics for our times and an evolutionary imperative. Simply stated, the principle of reverence for life finds its expression in "unconditionally respecting the wish of other beings to exist as one does toward oneself." Schweitzer strove hard to put this principle into practice in his own personal life as well as in his work as a medical missionary in central Africa.

---

[30]Thich Nhat Hanh, *The Heart of Understanding: Commentaries on the Prajnaparamita Heart Sutra* (CA, Berkeley: Parallax Press), 3–5.

Schweitzer acknowledged that in nature one form of life must always prey upon another. However, he believed that a self-aware, ethical human being respects the will of other beings to live and endeavors hard to minimize the unavoidable harm as far as possible:

> Standing, as all living beings are, before this dilemma of the will to live, a person is constantly forced to preserve his own life and life in general only at the cost of other life. If he has been touched by the ethic of reverence for life, he injures and destroys life only under a necessity he cannot avoid, and never from thoughtlessness.[31]

The principle of reverence for life is based on the underlying unity and oneness of life. David Bohm, Einstein's colleague and successor at Princeton, believed that the quantum theory reveals the "unbroken wholeness of the universe."[32] Quantum physics tells us that separation is only an optical illusion. According to Bohm, this is the natural state of the human world—*separation without separateness*. However, we continue to delight in differences and fail to see that which is essentially same in all of us. It is abundantly evident that divisions of race, religion, color, creed, and culture have contributed to the most heinous horrors of humankind. This will continue unabated, as history testifies, until we see the tyranny of our disempowering stance and become mindful of our hidden wholeness.

Since we *are* the world, transforming *ourselves* is essentially transforming the *world*.[33] We can no longer only rely on the political and governmental systems to solve the present sustainability crisis. As is evident from the foregoing, only an individual life rooted in the continuous harmony with nature—a life based on moral and spiritual awareness—can be sustainable for the entire creation. Put differently, only by reclaiming the spiritual dimension of who we truly are can we preserve the sanctity of the planet.

Conclusion

The last century has highlighted both the creative and the destructive power of human ingenuity. Whereas humanity's greatest gains in this century came in the areas of science and technology, we also witnessed the horror of two world wars, the rise of international terrorism, and economic and financial meltdowns. Many believe that the greatest harm occurred in the erosion of moral and spiritual values.

---

[31]Albert Schweitzer, *Out of My Life and Thought* (Baltimore, MD: Johns Hopkins University Press, 1998), 236.

[32]See David Bohm, *Wholeness and the Implicate Order* (London: Routledge Classics, 2002). For general background, see also Ken Wilber, ed., *Quantum Questions: Mystical Writings of World's Great Physicists* (Boston: Shambhala, 1984).

[33]See: J. Krishnamurti, *You are the world* (New York: Perennial/Harper & Row Publishers, 1973). This book is a collection of 12 talks given to students at Brandeis, Berkeley, Stanford, and at Santa Cruz. The recurring theme is that we can change the world by bringing about psychological transformation. Krishnamurti says, "It seems to me that our responsibility is to understand ourselves first, because we ARE the world…. In this matter of finding out, there is no authority, there is no guru, there is no teacher. You are the teacher and the disciple yourself." (pp. 31, 74).

In his splendid little book, *The Compassionate Universe*, Eknath Easwaran underscores the *urgency* of the responsibility of humans to *heal* the environment —"the only creatures on Earth who have the power—and, it sometimes seems, the inclination—to bring life on this planet to an end."[34]

Eleanor Roosevelt, with an insightful futuristic vision, has said, "The future is literally in our hands to mold as we like. But we cannot wait until tomorrow. Tomorrow is now."

The choice is ours.

---

[34]Eknath Easwaran, *The Compassionate Universe: The Power of Individual to Heal the Environment* (Petaluma, California: Nilgiri Press, 1989), 7.

What Sustainability *shift* Will You Make in your life?

1. Review this introductory chapter and list the key ideas that resonated with you.

    _____

    _____

2. Focus on one idea from this chapter that will make the biggest sustainability *shift* for you.

    _____

    _____

3. Imagine this shift. As you visualize the sustainability *shift* grounded in spirituality, ask yourself: Why is this shift important? What difference will it make in terms of your *total* footprint?

    _____

    _____

4. Develop a specific plan to implement the *shift*.

    _____

    _____

5. Enact this shift. Commence your sustainability *shift* now.

    _____

    _____

Sustaining the Cosmic Wheel of Creation: Journey from Consumer to Contributor

2

Satinder Dhiman

> *Nature and wisdom never are at strife.*
>
> —Plutarch
>
> *If you want to awaken all of humanity, then awaken all of yourself.*
> *If you want to eliminate the suffering in the world,*
> *then eliminate all that is dark and negative in yourself.*
> *Truly, the greatest gift you have to give is that of your own self-transformation.*
>
> —Lao Tzu, *Hua Hu Ching*, 75

Abstract

The sorry plight of contemporary world is that we are too preoccupied in the relentless pursuit of changing everything in the external world except ourselves. Gandhi once said, "Our greatness lies not so much in being able to remake the world as being able to remake ourselves." (Eknath Easwaran, *The Compassionate Universe: The Power of the Individual to Heal the Environment* (California: Nilgiri Press, 1989), 20.) When the spiritual dimension of our being is underdeveloped, we turn into pleasure-seeking automatons, plundering the planet in a mindless race called progress. This makes us self-centered and greedy for material wealth which leads to social disharmony and over-exploitation of natural resources, ignoring a vital fact that unlimited growth on a finite planet cannot be possible. When we live a life of greater self-awareness, we tend to consume less and, more so, less mindlessly. With this understanding comes the liberating realization that *there is no sustainability without spirituality*. The central thesis of this chapter is that in order for sustainability to be sustainable, it must help us transition from *being a consumer* to *becoming a contributor*. To facilitate this transition, the chapter will present some contemporary applications of the concept of Cosmic Wheel of

S. Dhiman (✉)
Woodbury University, Burbank, USA
e-mail: satinder.dhiman@woodbury.edu

Creation as conceived by the Bhagavad Gītā, the Indian wisdom text. Since all wars are fought first in the mind, this chapter will also suggest that the starting point for safeguarding the sustainability of our planet is purging our mind of the toxic emotions. It will present some strategies for managing excessive desire, anger, and greed that rob our peace of mind and in turn disturb the peace of the planet. In addressing these vital issues, a symbiotic and dialectic approach will be followed applying the key tenets of Advaita Vedānta and Buddhist Psychology.

Politics Without Morality and Economics Without Ethics

Politics without morality, even so as economics without ethics, is a dead end road for it ignores the humanity of who we are. As we evolve spiritually, we realize the terror of this disempowering stance. Since we *are* the world, transforming ourselves is essentially transforming the world. We can no longer only rely on the political and governmental systems to solve the present sustainability crisis. This chapter maintains that only an individual life rooted in the continuous harmony with nature—a life based on moral and spiritual awareness—can be sustainable for the entire creation. Put differently, only by reclaiming the spiritual dimension of who we truly are can we preserve the sanctity of the planet.

We believe that the solution to society's current chaos lies in the spiritual transformation of each one of us. Observation and reflection dictate that the universe was not created for humans alone. In the grand scheme of things, all forms of life are equally precious and so are their needs. It is a matter of great concern that as humans, we are the least sustainable of all species. Jonas Salk is reported to have said, "If all the insects were to disappear from the Earth, within fifty years all life on Earth would end. If all human beings disappeared from the Earth, within fifty years all forms of life would flourish."[1]

Vedānta: The Art and Science of Harmonious Living

By way of a holistic solution to the current sustainability dilemma, the chapter unfolds the vision of Oneness as propounded in Advaita Vedānta, the non-dual philosophy enunciated in the Upaniṣads and the Bhagavad Gītā, the spiritual texts of India. The Dalai Lama has also recently reminded us that "we need to promote a sense of the oneness of the 7 billion human beings."[2] The understanding of this fundamental truth, that we are essentially One Limitless Reality, "strikes at the very root of narrow views based on selfishness and is the foundation of higher ethics.

---

[1]"If all the insects were to disappear from the earth." Quoted during a Ted Talk by Sir Ken Robinson. Retrieved August 20, 2015: https://www.youtube.com/watch?v=0JYW2JFkXsg.

[2]His Holiness the Dalai Lama Talks to the Japan Doctors Association, April 4, 2015. Retrieved January 15, 2016: http://www.dalailama.com/news/post/1258-his-holiness-the-dalai-lama-talks-to-the-japan-doctors-association.

This higher Self is of the nature of Bliss, as displayed in our instinctive love of Self; and to recognize it in others is to bring social harmony, for no one will be inclined to harm himself. It paves the way for spiritual and moral perfection."[3] The Gītā (13.28) puts it succinctly: "He who perceives the one Lord dwelling in all beings as their Self cannot harm another, for the Self cannot harm itself."[4] When you feel the suffering of every living being in your heart, that is true awareness. This is the key message of the Gītā.

Why focus on the Upaniṣads and the Gītā, above all? The Upaniṣads have been extolled as "Himalayas of the Soul."[5] Upaniṣads are spiritual treatises of Hinduism that contain the culminating wisdom of the Vedas, the books of Knowledge (gnosis). They are also known as Vedānta (*Veda* + *anta*: the end, *anta*, of the Veda). The Sanskrit word *Upaniṣad* means "sitting down near": *upa* (near), *ni* (down), and *shad* (to sit). That is, knowledge received by sitting down humbly near a teacher. Alternatively, the word *Upaniṣad* denotes: *upa* (near), *ni* (definitive, doubt-free), and *shad* (to loosen or to destroy). In short, the word, *Upaniṣad*, signifies self-knowledge, for our self is the most *nearest* thing to us. So it represents that knowledge which destroys ignorance most certainly and brings the seeker close to the Ultimate Reality of his/her own Self or existence. A treatise that contains such knowledge is therefore called Upaniṣad.

The greatest Indian philosopher and commentator of sacred Hindu texts, Ādi Śaṅkarācārya,[6] takes this derivation and therefore equates the term Upaniṣad with self-knowledge (*ātma-vidyā*) or the knowledge of the Absolute (*Brahma-vidyā*). This is also referred to as "secret knowledge" or "esoteric knowledge." The secrecy is not so much a matter of unwillingness on the part of the teacher to *reveal* this teaching as it is to ensure *preparedness* and *readiness* on the part of the student to *receive* this knowledge.

Consider the opening verse of *Īśopaniṣad* which states, "Behold the universe in the glory of God: all that lives and moves on earth. Leaving the transient, find joy in the Eternal: set not your heart on another's possession."[7] The importance of this verse is evident from the fact that Gandhi held this opening verse in such high esteem that he believed that it contained the essence of Hinduism. *Īśopaniṣad*, one of the ten principal Upaniṣads, is a short text of just 18 verses. Gandhi believed that the entire

---

[3]K.A. Krishanswamy Iyer, *Collected Works of K.A. Krishnaswamy Iyer* (Holenarasipur: Adhyatma Prakash Karyalaya, 2006), 239.

[4]Ibid., 251. This is Mr. Iyer's rendition of Gita's verse 13.28. This author has not come across such a unique and apt interpretation anywhere else.

[5]Juan Mascaró, translated and selected, *The Upanishads* (New York: Penguin Books, 1965/1979), 43.

[6]Though strictly not its founder, Śaṅkarācārya was undoubtedly the greatest expounder and systematizer of Advaita. Karl Jaspers (1883–1969), the famous Austrian existentialist philosopher, once told Professor K. Satchidananda Murthy that "*there is no metaphysics superior to that of Śaṅkarā.*" See K. Satchidananda Murty, *Revelation and Reason in Advaita Vedanta* (New York: Columbia University Press, 1959), p. xvii. (emphasis added).

[7]Juan Mascaró, translated and selected, *The Upanishads* (New York: Penguin Books, 1965/1979), 49.

Bhagavad Gītā could be seen as a commentary on just that initial verse.[8] When asked to sum up the meaning of life in three words or less, Gandhi responded cheerfully, "That's easy: Renounce and enjoy."[9] The message of the Upaniṣads is: Reality is One, without a second. And there is an absolute identity, oneness, between the truth of an individual (*ātman*) and the truth of the universe (*Brahman*).

If the value of a wisdom text lies in enabling us to lead a better spiritual and social life, then the Gītā meets these two tests supremely. As Sir S. Radhakrishnan, Spalding Professor of Eastern Religion and Ethics at University of Oxford (1936–1952), has stated:

> The two tests of the value of any religious Scripture are whether it helps man to find himself and attain peace and whether it contributes to social harmony. It seems to me that the religion of the Gita satisfies these two tests, the *spiritual* and the *social*.[10]

The Bhagavad Gītā, the loftiest philosophical poem that forms a part of the epic, Mahābhārata, is a well-known Indian spiritual and philosophical text and its message is universal and non-sectarian. Both the Gītā and the Vedas base their philosophy of universalism on the understanding that the whole existence essentially forms one single unitary movement despite the apparent variegated diversity. What universal vision of ethical conduct is presented by the Gītā and the Upaniṣads which fosters sustainable lifestyle and growth? In the remaining sections of this chapter, we present some spiritual values and virtues based on the teachings of the Gītā and Upaniṣads that can contribute significantly to sustainable existence.

Fivefold Offerings to the Universe: Pancha Mahā Yajñās

Ethical conduct in the Upaniṣads revolves around the five *Yajñās* or offerings/sacrifices. These sacrifices are described as a person's duty toward gods, seers, ancestors, fellow humans, and animals. The *Pancha Mahā Yajñas* are extremely versatile set of religious-cum-spiritual disciplines. They have a religious (ritualistic) dimension as well as a spiritual (non-ritualistic) dimension. We provide the spiritual version of these "offerings" as follows:

These *Pancha Mahā Yajñās*—five areas of contribution—are:[11]

---

[8]Thomas Weber, "Gandhi's Moral Economics: The Sins of Wealth Without Work and Commerce Without Morality," in Judith M. Brown and Anthony Parel, eds., *The Cambridge Companion to Gandhi* (Cambridge, UK: Cambridge University Press, 2011), p. 138. See also: Eknath Easwaran, *The Upanishads, Translated for the Modern Reader* (Tomales, CA: Nilgiri Press, 1987), 205.

[9]Eknath Easwaran, trans., *The Upanishads, Translated for the Modern Reader* (Berkeley, CA: Nilgiri Press, 1987), 205.

[10]Sir S. Radhakrishnan, as cited in D.S. Sarma, *Lectures on the Bhagavad Gita*, with an English translation of the *Bhagavad Gita* (Maylapore, The M.L.J. Press; 4th edition, 1945), viii. [emphasis added].

[11]The section on *Pancha Mahā Yajñās* draws upon Swami Paramarthanandaji's discourse, *The Spiritual Journey*. Retrieved July 20, 2015: http://talksofswamiparamarthananda.blogspot.com/. Also see: https://www.youtube.com/watch?v=a4jfDxMaXWQ.

1. *Pitru Yajña* (Offering/Service to Parents/Elderly and Ancestors)
2. *Manushya Yajña* (Offering/Service to all Human Beings)
3. *Bhūta Yajña* (Offering/Service to the Animals and Plants)
4. *Deva Yajña* (Offering/Service to the Lord)
5. *Brahma Yajña* (Offering/Service to all Seers/Saints and Scriptures)

Our first contribution is in the form of the *Pitru Yajña*—whatever we do for the preservation of the family and for the protection and honoring of our ancestors and our senior citizens in general. The maintenance of family structure with love and care is *Pitru Yajña.* A society is considered mature only when it takes care of its elderly people properly with respect and reverence. Next contribution is the *Manushya Yajña* which is in the form of all kinds of social service that we do through varieties of organizations, charities, and associations. In this offering, we help our fellow human beings. The *Bhūta Yajña* represents our reverential attitude toward all the plants and animals and our contribution for the protection of nature, protection of environment, and protection of ecological balance. The *Deva Yajña* represents our reverential attitude toward the five basic elements, *Pancha Mahā Bhūtāni*—Space, Fire, Air, Water, and Earth. These elements are looked upon as the divine expression of the Lord. The worship is offered to the Lord conceived in the form of a Universal Being, *Vishva rūpa Īśvara*. Finally, the *Brahma Yajña* represents our reverential contribution to the preservation and propagation of scriptural learning by supporting the teachers, *ācāryas*, and the spiritual institutions which support and propagate such activities.

When we follow the *Pancha Mahā Yajñā*, it brings about an all-round harmony through spiritual, *dhārmik*, activities. We conclude this section with a Peace Invocation:

ॐ सर्वे भवन्तु सुखिनः सर्वे सन्तु निरामयाः ।
सर्वे भद्राणि पश्यन्तु मा कश्चिद्दुःखभाग्भवेत् ।
ॐ शान्तिः शान्तिः शान्तिः ॥

oṁ sarve bhavantu sukhinaḥ sarve santu nirāmayāḥ |
sarve bhadrāṇi paśyantu mā kaścidduḥkhabhāgbhavet |
oṁ śāntiḥ śāntiḥ śāntiḥ ||

May all be happy, May all be free from misery.
May all realize goodness, May none suffer pain.
Om! Peace. Peace. Peace.

Key Ethical and Spiritual Virtues

Ethics deals with choosing actions that are right and proper and just. Ethics is vital in commerce and in all aspects of living. Society is built on the foundation of ethics. Without adherence to ethical principles, businesses are bound to be unsuccessful in

the long run. As has become abundantly evident from the recent events, without ethics, a business degenerates into a mere profit-churning machine, inimical to both the individual and the society.

Virtues are *lived* values. In this context, Aristotle, the great Greek philosopher and author of *Nicomachean Ethics*, employs the word "hexis"[12] (from Latin "habitus") in a very special sense, denoting "moral habituation" or a dynamically "active state of moral virtue." For Aristotle, happiness is the "virtuous activity of the soul in accordance with reason." Urmson clarifies that, in Aristotle's view, "the wise man who wishes for the best life will accept the requirements of morality."[13] Aristotle further clarifies that, to be happy, we should seek what is good for us in the long run for we cannot become happy by living for the pleasures of the moment. Aristotle includes among the main constituents of happiness such things as health and wealth, knowledge and friendship, good fortune, and a good moral character. For him, a life lived in accordance with excellence in moral and intellectual virtue constitutes the essence of a happy life: "He is happy who lives in accordance with complete virtue and is sufficiently equipped with external goods, not for some chance period but throughout a complete life….*A good life is one that has been lived by making morally virtuous choices or decisions.*"[14]

In the same manner, the Buddha uses the word "compassion" in the sense of "wisdom in action"—right understanding flowering into right action. Chinese use a word called "te" which means virtue in the same sense. *Tao Te Ching* is great classic book by Lao Tzu. It means the Way, the way of virtue and power—denoting that one has to walk upon it.

As we saw in the introductory chapter, Sanskrit word "*Ṛta*" means "cosmic order" and "*dharma*" means the self-nature of a thing: like burning/heat is the self-nature of fire. Similarly, as human beings, morality, virtue, is our innate nature—every one "knows" that it is not right to hurt others. How so? It is because no one wants to be hurt. I do not want to be hurt; likewise no one else wants to be hurt; therefore, I should not hurt any being. So, it is our "moral duty" not to hurt, as the great German philosopher Immanuel Kant would say. Then why as humans, despite our knowing well that it is not right to hurt others, we end up still hurting others through wars, aggression, active, and passive violence? Is there a way out of it?

In the Bhagavad Gītā (16.1-3), Śrī Kṛṣṇa described that fearlessness, purification of one's existence, cultivation of spiritual knowledge, charity, self-control, performance of sacrifice, study of the Vedas, austerity, simplicity, nonviolence, truthfulness, freedom from anger, renunciation, tranquility, aversion to faultfinding, compassion for all living entities, freedom from covetousness, gentleness, modesty, steady determination, vigor, forgiveness, fortitude, cleanliness, and freedom from envy and from the passion for honor are among the essential qualities which are

---

[12]W.D. Ross rendered "hexis" as a *state of character*. See David Ross, translation of Aristotle's *Nicomachean Ethics* (Oxford: Oxford University Press, 1980).

[13]J.O. Urmson, *Aristotle's Ethics*, 2.

[14]Mortimer Adler, *Arsitotle for Everybody: Difficult Thought Made Easy* (New York: Bantam Books, 1980). Emphasis added.

needed for our self-development. These qualities are in the mode of goodness (*sattva guṇa*) and are considered essential not only for leaders to govern but also auspicious for their own progress on the path of liberation. Good leadership approaches and practices in the Bhagavad Gītā philosophy are also deep-rooted in the concept of *dharma* or virtue.

In the Gītā's terminology, the performance of actions selflessly as a service or as an offering to the Supreme sustains the cosmic system. In turn, such actions purify the mind and make it a fit vessel for the reception of self-knowledge which alone is the true means to spiritual freedom.

The spirituality of the Gītā is firmly rooted in the ethical values. There is no progress on the path of spirituality if there is no harmony and unity between our *vichāra* (thought process) and *āchāra* (conduct). Without ethical purity, the true message of the Gītā will elude us. Gandhi who made his life his message believed that one needs to observe five disciplines to arrive at the correct understanding of the interpretation of the Gītā:

> But you must approach it with the five necessary equipments, viz., *ahimsa* (nonviolence), *satya* (truth), *brahmacharya* (celibacy), *aparigraha* (non-possession), and *asteya* (non-stealing). Then and then only will you be able to reach a correct interpretation of it. And then you will read it to discover in it *ahimsa* and not *himsa*, as so many nowadays try to do.[15]

These five disciplines are called *yamas* (abstentions) since they represent "moral restraints" or rules for living virtuously. These rules can be very effective in the workplace to create an atmosphere of amity and harmony. Practicing these abstentions, however, does not equal becoming "ineffectual" or allowing ourselves to be taken advantage by others. Commenting on these five *yamas*, Swami Prabhavananda and Christopher Isherwood have rightly noted, "We must think of ourselves as the servants of the mankind, and be ready to put ourselves at the disposal of those who need us. It does not mean, however, to lend ourselves to the evil purposes of others …The truly helpful man is like public trolley car, available to all who care to use it, but travelling, nevertheless, along a fix route to its destination."[16]

Ensuring the Wellbeing of All Beings

As a practical manual of living, the Gītā articulates a vision of life which is at once lofty and pragmatic. It presents values that are at once universal and cosmic in scope, germane not only to human beings but to all living beings. It lays down the guidelines for leading a wakeful and a meaningful life—a life marked by goodness and contribution. What makes our life purposeful and meaningful? What is the

---

[15]Cited in Raghavan Iyer, *The Essential Writings of Mahatma Gandhi* (New Delhi: Oxford University Press/Oxford India Paperbacks, 2012), 69.

[16]Swami Prabhavananda and Christopher Isherwood, *How to Know God: The Yoga Aphorisms of Patanjali* (Hollywood, CA: Vedanta Society, 1953/2007), 148–149.

essence of being good and doing good? What does it mean to grow in goodness? How can one grow from being a consumer to becoming a contributor? The Gītā holds the keys to all these existential questions, and much more. It recommends that we approach life as a network of mutual interdependencies in which everyone has to contribute their allotted share. And the touchstone is not mere human welfare but the welfare of all beings (*sarvabhūtahite*: BG 5.25; 12.4). Only then we can ensure the preservation of the planet. This understanding holds the key to a sustainable future for all.

Turning the Wheel of Cosmic Co-creation: Our Life as an Offering!

In order to grow spiritually, enjoin the Vedas, one has to convert one's whole life into an offering to the Divine, as a sort of cosmic sacrifice (*yajñārthātkarmaṇo*: BG 3.9). According to the Gītā (3.10–3.13), all beings are a part of the cosmic wheel of creation, sustained by the principle of mutual contribution and mutual maintenance. Therefore, every action should be performed in a spirit of sacrifice, *yajña*, which sustains all beings, as an offering to the Universal Lord. They are great thieves, according to the Gītā, who do not help in the turning of this cosmic wheel of sacrifice (3.12). Thus, the Gītā does not stop at concern for humans alone; it is *cosmic in its scope* and *universal in its view*.

The Gītā (18.5) mandates threefold acts of sacrifice (*yajña*), charity (*dānaṃ*), and austerity (*tapas*) and considers these as the "purifiers of the wise" (*pāvanāni manīṣiṇām*). "*Yajña*" literally means a sacrifice or an offering. The highest form of offering is living a life of sincerity—a life led by being good and doing good. A sincere life is characterized by doing what we love and loving what we have to do. "*Dānaṃ*" means charity and denotes much more than writing a check to a favorite cause or organization. At the deepest level, it means the gift of "expressed love."

The Vedic philosophy of India has always emphasized the human connection with nature. The sacred literature of India—The Vedas, Upaniṣads, Purāṇas, Mahābhārata, Rāmāyaṇa, and Bhagavad Gītā—contains some of the earliest teachings on ecological balance and harmony and the need for humanity's ethical treatment of Mother Nature. The Vedic seers recognized that the universe is intelligently put together which presupposes knowledge and intelligence. They underscored interdependence and harmony with nature and recognized that all natural elements hold divinity. They posit the Lord as the maker as well as the material of the world, thus investing all creation with divine significance. Vedas do not view creation as an *act* of "creation" per se as many theologies postulate, but an *expression* or manifestation (*abhivyakti*) of what was unmanifest before.

The following excerpt from Chāndogya Upaniṣad, one of the most important Upaniṣads, explains the process of creation in an amazingly simple scientific term, and puts the irreducible minimum of spirituality based on this understanding within the compass of one short paragraph. By way of universal spirituality, it also represents its pinnacle:

> In the beginning, there was Existence alone—
> One only, without a second.
> It, the One, thought to Itself:
> "Let Me be many, let Me grow forth."
> *Thus, out of Itself, it projected the universe,*
> *and having projected the universe out of Itself,*
> *It entered into every being.*
> All that is has its self in It alone.
> Of all things It is the subtle essence.
> It is the truth. It is the Self.
> And you are That!

—Chāndogya Upaniṣad[17]

How can God be both the material (*upādāna*) and efficient (*nimita*) cause of the universe? Are there any parallels of this phenomenon in the familiar world? The Vedas provide two examples to show how the maker and the material can be one. The first example is of a spider and the spider web. Spiders produce silk from their spinneret glands located at the tip of their abdomen.[18] The second example is dream objects and their creation by the dreamer. During dream, the "dreamer" is the single material and efficient cause (*abhina nimita upādāna kāranam*) of dream creations. When a dreamer dreams about being afraid seeing a lion, the outside world, lion, jungle, and so forth are the creations of dreamer's mind. The emotion of fear is also within dreamer's mind.

The great practical advantage of viewing the Lord as both the material and the maker of the universe is the attainment of spiritual outlook regarding the entire creation. When everything becomes divine in our eyes, we develop a reverence for all life. Equipped with this understanding of One Self in All and All in One Self (*sarvātmabhāva*), we can live a life of harmony, benevolence, and compassion toward all existence.

Our dignity as humans should lie in protecting those who are weaker than us. Those who have more power ought to be more kind to those who are weak. All spiritual traditions teach us not to do to others what we don't want to be done to us. No living being wants to be hurt, to die. Moreover, this cruelty to animals is not

---

[17]Adapted from Eknath Easwaran, trans., *The Upanishads, Translated for the Modern Reader* (Berkeley, CA: Nilgiri Press, 1987) and Swami Nikhalananda, trans. and ed., *The Upanishads: A One Volume Abridgement* (New York: Harper & Row Publishers, 1964).

[18]Spider Web. Retrieved July 31, 2015: https://en.wikipedia.org/wiki/Spider_web.

environmentally sustainable. That time does not seem to be too far when we will have to stop this, if only as an environmental necessity.

In the following section, we explore the necessity of adopting a plant-based diet as a matter of compassionate and sustainable necessity.

Sustainable Diet: Animal-Based Versus Plant-Based?

In their groundbreaking book *Population, Resources, Environment*, Stanford Professors Paul R. and Anne H. Ehrlich state that the amount of water used to produce one pound of meat ranges from 2500 to as much as 6000 gallons.[19]

As stated earlier, one of the cardinal principles of sustainability is that, in the name of progress, we should not *upset* the very *setup* carelessly. At its most fundamental level, that entails paying attention to what we eat since our bodies are primarily "food bodies" and we are what we eat. Sri Ramana Maharshi, the great Indian sage of twentieth century, used to say that of all the yogic rules and regulations, the best one is taking of *Sāttvic* foods in moderate quantities. This view is consistent with that expressed in the Bhagavad Gītā and indeed most of the sacred literature of India. According to the Bhagavad Gītā (17.8), *Sāttvik* foods are those foods which nourish the body and purify the mind—foods that contribute to longevity, purify one's mind, and provide strength, health, happiness, and satisfaction. Such foods are sweet, juicy, fatty, and palatable. On the other hand, the Gītā (17.9-10) continues, foods which are too bitter, sour, salty, pungent, dry, and hot can lead to pain, distress, and disease of the body. According to the *Chāndogya Upaniṣad* (7.26.2), "When the food is pure, the mind becomes pure. When the mind is pure, the memory becomes firm. When memory is firm, all ties are loosened."[20]

What is the moral and metaphysical basis of a vegetarian diet? It is the understanding that no living being wants to get hurt or to die. Our self is the dearest of all to us. Love of self comes as a natural endowment that perhaps has its roots in the instinct of self-preservation. An important verse in one of the Upaniṣads states that we do not love our husband, wife, son, or any other being for their sake, but for one's own sake: "It is not for the sake of all, my dear, that all is loved, but for one's own sake that it is loved."[21] However, in our bid to get our self-interest across, we often tend to forget the simple fact that, likewise, everyone's self is also most dear to him or her.

---

[19]Also see: John Robbins, *Diet for a new America: how your food choices affect your health, your happiness, and the future of life on earth* hn (Novato, Calif.: H J Kramer, 2012).

[20]Swami Nikhalananda, trans. and ed., *The Upanishads: A One Volume Abridgement* (New York: Harper & Row Publishers, 1964), 347.

[21]*na vā are sarvasya kāmāya sarvam priyam bhavati, ātmanastu kāmāya sarvam priyam bhavati*: Swāmī Mādhavānanda, *Brihadāraṇyaka Upaniṣad*, *with the Commentary of Śankarācārya* (Kolkata, India: Advaita Ashrama, 2008), 246–247.

Metaphysically speaking, all life is one. According to the Hindu Vedic tradition, all creatures form the limbs of a single, all-pervading divine being. To benefit any one limb is to benefit the divine being and to harm any is to harm the integrity of the divine being. Therefore, every one of our actions should be performed for the welfare of all beings. All the great spiritual traditions of India, drawing upon this root idea, dictate that a spiritual aspirant must abstain as much as possible from causing any harm to any living being. However, at the same time, it was recognized that life inherently involves harm of some form or another.

Life Feeds on Life

It is an inevitable principle of life that life feeds on life. As a Vedic verse puts it, "Life lives by living off another life" (*jīvo jīvena jīvati*). It is true that vegetarians too cause harm by killing plants or using animals to plow the fields, so inadvertently harming other beings in the process of raising crops. However, this seems minimal compared to the routine cruelty that is involved in raising, transporting, and slaughtering animals for food. For want of a nervous system, the plants cannot feel the pain but the animals can. Like us, these animals can feel the pain and do not wish to be physically hurt or killed.

It is true that no one in reality can have a completely harmless existence. But that does not mean that we should abandon the core value of harmlessness. We must *minimize* the harm we cause to other creatures as far as possible. The Buddha said, "All tremble at violence; all fear death. Putting oneself in the place of another, one should not kill or cause another to kill."[22] Clearly no one is arguing that Eskimos and others who have no other means of sustenance should adopt a vegetarian diet. However, abstaining from eating meat is possible for nearly all of us, given the choices that the modern life accords.

High Cost of Raising Livestock

Raising livestock for meat comes at a very high cost to the environment. Climate-impacting emissions are produced not just by the animals' digestive systems, but also by the fertilizers and manure used to produce feed and the deforestation taking place to provide grazing lands. To add insult to injury, livestock animals consume large amounts of water, agricultural and land resources that could be deployed to support a higher quality of life for humans. In a 2014 research report by Chatham House, the Royal Institute of International Affairs, an independent policy institute based in London, Rob Bailey, Antony Froggatt, and Laura Wellesley provide a comprehensive overview of high environmental cost of raising livestock. They also review the findings of the United Nations Food and Agriculture

---

[22]Acharya Buddharakkhita, trans., *Dhammapada: The Buddha's Path of Wisdom* (Kandy, Sri Lanka: Buddhist Publication Society, 1985), 43.

Organization (FAO) over last ten years. Their research indicates that livestock industry produces more greenhouse gas emissions than all cars, planes, trains, and ships combined:

> Livestock production is the largest global source of methane (CH_4) and nitrous oxide (N_2O) – two particularly potent GHGs….The global livestock industry produces more greenhouse gas emissions than all cars, planes, trains and ships combined….Emissions from livestock, largely from burping cows and sheep and their manure, currently make up almost 15 % of global emissions. Beef and dairy alone make up 65 % of all livestock emissions. Average global estimates suggest that, per unit of protein, GHG emissions from beef production are around 150 times those of soy products, by volume.[23]

According to a 2006 report by the United Nations Food and Agriculture Organization (FAO), our diets and, specifically, the meat in them cause more greenhouse gases such as carbon dioxide (CO_2), methane, nitrous oxide, and the like to spew into the atmosphere than either transportation or industry. The FAO report found that current production levels of meat contribute between 14 and 22 % of the 36 billion tons of "CO_2-equivalent" greenhouse gases the world produces every year.[24]

Although experts have known the heavy impact on the environment of meat production, but recent research shows a new scale and scope of impact, particularly for beef. The popular red meat requires 28 times more land to produce than pork or chicken, 11 times more water, and results in five times more climate-warming emissions. When compared to staples like potatoes, wheat, and rice, the impact of beef per calorie is even more extreme, requiring 160 times more land and producing 11 times more greenhouse gases, with one expert saying that eating less red meat would be a better way for people to cut carbon emissions than giving up their cars.[25]

According to Professor Tim Benton, at the University of Leeds, "The biggest intervention people could make towards reducing their carbon footprints would not be to abandon cars, but to eat significantly less red meat."[26]

A Case in Point: Which Diet Is Best Suited for Humans? *Which diet is most sustainable for humans—meat-based or plant-based? While most humans are clearly "behavioral" omnivores, the question still remains as to whether humans are anatomically suited for a diet that includes animal as well as plant foods. One important argument in favor of a vegetarian diet is*

---

[23]Rob Bailey, Antony Froggatt and Laura Wellesley, "Livestock—Climate Change's Forgotten Sector: Global Public Opinion on Meat and Dairy Consumption." A Research Paper. Chatham House, the Royal Institute of International Affairs, London: December 2014.

[24]Nathan Fiala, How Meat contributes to Global Warming, *Scientific American*, February 1, 2009. Retrieved January 25, 2016: http://www.scientificamerican.com/article/the-greenhouse-hamburger/.

[25]Damien Carrington, "Giving up beef will reduce carbon footprint more than cars, says expert," *The Guardian*, July 21, 2014. Retrieved January 25, 2016: http://www.theguardian.com/environment/2014/jul/21/giving-up-beef-reduce-carbon-footprint-more-than-cars?CMP=share_btn_fb.

[26]Ibid.

based on the idea that human anatomy and physiology is best suited to a plant-based diet.[27] In his perceptive essay,[28] The Comparative Anatomy of Eating, Milton Mills notes that "observation" is not the best technique to use when trying to identify the most "natural" diet for humans.

Mills suggests that a better and more objective technique is to look at human anatomy and physiology. Humans are vegetarian by design. Our flat teeth are perfect for grinding grains and vegetables, not for tearing apart animal flesh. Similarly, our hands are designed for gathering, not for flesh-tearing. Our saliva contains the enzyme alpha-amylase, the sole purpose of which is to digest the complex carbohydrates in plant foods. (This enzyme is not found in the saliva of carnivores.) Basically we have all the right apparatus to consume vegetarian products, and none of the right apparatus for flesh foods. After a detailed comparative analysis of the oral cavity, stomach, small intestines, and colon structure of carnivores, herbivores and omnivores, Mills, on balance, states that,

> In conclusion, we see that human beings have the gastrointestinal tract structure of a "committed" herbivore. Humankind does not show the mixed structural features one expects and finds in anatomical omnivores such as bears and raccoons. Thus, from comparing the gastrointestinal tract of humans to that of carnivores, herbivores and omnivores we must conclude that humankind's GI tract is designed for a purely plant-food diet.[29]

One of the arguments frequently advanced by meat eaters to explain their food choices is that meat gives the body strength, builds muscle, and so on. However, the evidence proves otherwise. For example, Dave Scott, a U.S. triathlete and the first six-time Ironman Triathlon Hawaii Champion, followed a strict vegetarian diet during his entire training period.[30] Another great example of the power of a vegetarian diet is Hawaii legend Ruth E. Heidrich. Ruth not only overcame the cancer, she went on to become an award-winning, record-breaking triathlete.[31] Ruth has run six Ironman triathlons, over 100 triathlons, 66 marathons and won more than 900 trophies and medals since her diagnosis of breast cancer in 1982 at the age of 47!

Likewise, many gorgeous creatures of the animal kingdom explode this myth that meat begets strength, muscle, or size.[32] Some of the big, beautiful,

---

[27]See, Virginia Messina and Mark Messina, *The Vegetarian Way: Total Health for You and Your Family* (New York: Harmony, 1996), 16.

[28]See Milton R. Mills, The Comparative Anatomy of Eating. Retrieved Oct. 21, 2015: http://www.adaptt.org/Mills%20The%20Comparative%20Anatomy%20of%20Eating1.pdf.

[29]Ibid.

[30]See Dave Scott (triathlete) entry in *Wikipedia*. Retrieved November 24, 2015: https://en.wikipedia.org/wiki/Dave_Scott_(triathlete).

[31]See Ruth E. Heidrich, *A Race for Life* (New York: Lantern Books, 2000).

[32]Top 10 Vegan Animals. Retrieved on October 30, 2015: http://www.vegansouls.com/top-vegan-animals.

> *strong, powerful animals are herbivorous such as elephants, rhinos, hippos, horses, and yaks. They do not seem to have any protein deficiency either.*

Case Reflection Questions

1. Do you think that plant-based diet is the *most natural* diet for humans?
2. Based on their anatomy, are humans naturally omnivores or herbivores?
3. If you were to consider a plant-based diet as a choice, what will be the basis of your decision: health, environment, or compassion? Or all three?
4. Do you believe that a plant-based diet is a *better choice* in terms both personal and environmental health?

Choose Compassion: *Live* and *Let Live*

Nonviolence, *ahiṁsā*, forms the basis for the vegetarianism within Jainism, Hinduism, and Buddhism though it goes well beyond just being vegetarian. This core principle is derived from the Vedic injunction "*mā hiṁsyāt sarva-bhūtāni*"—do no harm to living creatures. This recommendation is also repeated to the seeker after truth in the Upaniṣads. A commitment to a nonviolent way of life emanates from the profound understanding of the moral and metaphysical basis of life. It is only when one is able to cognize and "realize one's self in the Self of all" can one become nonviolent in the truest sense. The Christian dictum of "love thy enemy as thyself"—because our self is most dear to us—the practice of loving all, including our enemies, as "ourselves" hinges on realizing the fundamental oneness of all life.

According to one estimate,[33] 150 billion marine and land animals are slaughtered every year worldwide by the meat, dairy, egg, and fish industries with cruelty that has no parallel anywhere, not even within the animal kingdom itself. At this rate, the entire human population of the world will be wiped out in less than 20 days! Again, 150 billion animals are ruthlessly killed every year for a sandwich and human greed and gluttony! How can we claim to be the "crown of creation?" Perhaps, "bane of creation" is more like it. If one realizes the terror of the situation, living just by the "golden rule" alone—the ethical compass most people use to gauge right from the wrong—meat will be off the table for good. All this suffering and misery is preventable. We can all change what we eat, if we want to. The choice, as always, is ours!

---

[33]Gary Yourofsky, Best Speech You Will Ever Hear (Updated). YouTube video retrieved October 25, 2015: https://www.youtube.com/watch?v=_K36Zu0pA4U.

It is well beyond the scope of this chapter to recount the health hazards of eating meat. They are very well documented in the current scholarly and popular literature on health and nutrition. In the final reckoning, it all depends upon our personal beliefs and choices. These choices, being habit-driven, are not always easy to change, even if one is willing. The spirit is willing, says the Bible, but the flesh is weak. Observation and reflection make it clear that as human beings, we are not the most rational creatures when it comes to forming our beliefs and making our choices. If life were rational, nobody would choose to smoke. For some, the decision to become vegetarian happens instantly. They read some study on the risks of eating meat or watch documentary footage of a factory farm, and meat is off their menu for good. For others, the decision may come in fits and starts.

We cannot appeal to the tigers and lions in the jungle to become vegetarians. Carnivorous animals are programmed as such by nature. This is not the case with the humans. Gary Yourofsky, an American animal rights activist and a vegan superstar, is succinct:

> If you put a live bunny rabbit and an apple in the crib of a 2 year old, let me know when the child eats the bunny rabbit and plays with the apple. *We are purely herbivorous.* We have no carnivorous or omnivorous instincts whatsoever. And physiologically if your jaw moves from side to side in grinding motion when you chew, you are hundred percent herbivorous. If you were a meat eater like lion, your jaw will only go up and down, rip and swallow, then you are a carnivorous. If you sweat through your pores to cool yourself, you are herbivorous.[34]

Besides, animals do not have the awareness to choose differently based on what is right and what is wrong. As humans, we have choices and can certainly choose to become vegetarian/vegan as a healthy decision both for ourselves and for the environment. We can also choose to become vegetarian/vegan out of love, kindness, and compassion.

Once this author heard a sage explain, "I can live without fish. Why bother fish?" Exactly! Why bother the poor fish or a chicken or a cow. Of course, one can find a thousand reasons to rationalize and continue doing what one is doing in terms of one's eating habits. It has been observed that "when the reason is against man, man turns against reason." Choosing not to cause the suffering of other living creatures for the satisfaction of our taste buds and appetites is the minimal expression of compassion we all can offer. It is good for us and it good for the environment too.

Conclusion

The true ecological sustainability depends upon our deeper understanding of the fundamental spiritual values such as interconnectedness and oneness, nonviolence and compassion, contribution and selfless service. The journey of world transformation starts at the individual level: The way to achieve harmonious living

---

[34]Gary Yourofsky, Vegan Activist destroys Ignorant Reporter. YouTube video retrieved on October 25, 2015: https://www.youtube.com/watch?v=xYP1GGdRMYo.

in all spheres is through ethics and spirituality at the personal level. One does not have a right to take unless one has contributed in some way that is ecologically and socially beneficial. If we are to secure our survival as a species on this planet, there is a need to move from a mentality of competition to one of cooperation, from a lifestyle of being a consumer to becoming a contributor, based on the interconnectedness and preciousness of all life.

Chapter End Questions/Reflections

1. Do you believe that in order to transition from being a consumer to becoming a contributor, it is our *bounden duty* to contribute our allotted share to the environment at least equal to what we consume?
2. Based on some of the facts presented in this chapter, what specific actions do you plan to take to contribute your share toward environmental sustainability? Every small step matters.
3. Why it is important to understand the spiritual basis of all life to achieve a truly sustainable future?
4. What is the single most important thing that humans can do to ensure a sustainable future?

Moral Underpinnings of Sustainability

3

Joan Marques

Abstract

Whether we choose to live by the Golden Rule, utilize a universalistic moral viewpoint, adhere to a utilitarian conviction, or observe any alternative moral stance, sustainable behavior remains a fundamental aspect. This chapter briefly discusses the social responsibility-based quality performance standard, ISO 26000, which provides guidelines for Social Responsibility, SR, toward global sustainable development. Subsequently, the chapter reviews three of the most commonly used moral approaches and places them within the context of sustainable behavior, thereby establishing a direct link between individual and societal morality and sustainability. Given the ongoing global reality of corporate entities as the most powerful and influential ones, an example is presented of IKEA, a corporation that has manifested itself as a sustainable champion. This chapter also addresses the often-presented concern regarding whether it is possible for businesses to perform profitably and still be completely morally and sustainably responsible.

Our Moral Stance Toward Life

Whether we realize it or not, we all carry mental models with us that determine how we perceive the world. Those mental models are influenced by a number of factors: our culture, education, character, upbringing, religion, and our personal set of values, to name a few. Within our mental models most of us also embed a value system, which has at its core, the moral stance through which we make our

J. Marques (✉)
Woodbury University, Burbank, USA
e-mail: joan.marques@woodbury.edu

decisions. Many people do not think too much about the moral stance they adhere to: It is something like a second nature, and placing a label on it does not regularly cross their minds. Yet, when we start considering sustainability from a moral angle, it might be a good idea to first present the most common moral foundations people hold and subsequently try to find out how they make sense in light of sustainable performance. This is particularly critical for those of us in formal leadership positions. Educators and practitioners are continuously thinking of ways to improve leadership practices in the wake of numerous environmental and socially irresponsible practices and their effects for life on earth. One of the ideas that came forth from such thinking is the model of benevolent leadership in light of the global agenda, guided by, "(1) ethical sensitivity, (2) spiritual depth, (3) positive engagement, and (4) community responsiveness."[1]

Due to the ongoing threat to our renewable, finite, and social resources, especially from corporate activities, the International Organization for Standardization (ISO), assisted by experts of more than 75 countries, launched an international standard in November 2010, ISO 26000, in order to provide guidelines for Social Responsibility (SR) toward global sustainable development. Within the ISO 26000 context, SR is described as the responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behavior that contributes to sustainable development, including well-being of society, acknowledges stakeholder expectations, complies with applicable laws and international behavioral norms, and is embedded in the organization's internal and external relationships.[2] Organizations that want to engage in doing well while doing good are increasingly realizing that they should set up a comprehensive SR framework including the moral-based core elements of human rights, labor practices, the environment, fair operating practices, consumer issues, community involvement and development, and organizational governance.[3]

It may already be clear that the ethical component is one that cannot be erased from the concept of sustainable behavior. Returning to ethics as it originates at the individual level, the next section presents three of the most frequently discussed moral stances.

The Golden Rule

One of the most well-known and respected rules in human interaction is the Golden Rule, which states, "Do unto others as you would have them do unto you." The Golden Rule has been very popular throughout the past few millennia, which can be

---

[1]*The golden rule and the global agenda*. (2014). *Strategic Direction, 30*(8), 18–21.

[2]*ISO 26000: Guidance on Social Responsibility, 2010-11-01*. Retrieved on November 11 2015 from https://www.tuv.com/media/india/informationcenter_1/systems/Corporate_Social_Responsibility.pdf.

[3]*American Society for Quality* (Jan. 17, 2011). American National Standard: Guidance on social responsibility. Retrieved on November 11 2015 from http://asq.org/learn-about-quality/learn-about-standards/iso-26000/.

concluded from the fact that several variations of this principle were formulated over time.[4] Gensler, as cited in Burton and Goldsby, explains that "in rough chronological order, students have found the rule in recorded teachings of Zoroaster, Buddha, Confucius, Aristotle, Rabbi Hillel, Jesus of Nazareth, Thomas Hobbes, John Locke, John Stuart Mill, and Charles Darwin, as well as in Hinduism, Islam, and Taoism, among others."[5] Each of these, as well as other sources, has its own reciprocity-based statements, yet they all basically imply the same: treat others as you would like to be treated. Burton and Goldsby affirm that till today, the business world oftentimes uses the Golden Rule as a guideline in internal and external organizational practices.[6] These authors mention J.C. Penney, Lincoln Electric Co., and Worthington Industries Inc. as examples of business corporations that are using the Golden Rule as a guiding principle in their performance. A few decades ago, researchers even developed the Green Golden Rule, GGR, a sustainability based extension to an earlier developed "Golden Rule of Economic Growth," which delineated a growth path that grants the highest indefinitely maintainable level of instantaneous utility in a framework where environmental goods are valued in their own rights.[7] The Green Golden Rule rests on two maxims "no dictatorship of the present (NDP) and no-dictatorship of the future (NDF),"[8] whereby the first maxim requires the social welfare criteria (SWC) "to be sensitive to the welfare of the very long-run generations,"[9] and the second "to be sensitive to the welfare of both the present and the finitely distant generations."[10]

Strengths and weaknesses of the Golden Rule. The Golden Rule displays a number of important laudable philosophies such as the call for self-reflection in which one first considers how one would want to be treated before applying any treatment to others. The fact that the Golden Rule has been around as long as it has indicates that it has made sense to several human societies for many centuries. In light of sustainability, applying the Golden Rule might mean that those who engage in unsustainable actions would reflect on their actions and come to the conclusion that they are unfair unto others who suffer from those actions.

---

[4]Marques, J.F. (2008). The Spiritual Rule: Treat others as well as possible considering your best abilities and values, their preferences, and the well-being of all life. *International Journal of Organizational Analysis, 16*(1/2), 42–49.

[5]Burton, B.K. & Goldsby, M. (2005). The golden rule and business ethics: an examination. *Journal of Business Ethics 56*(4), p. 371.

[6]Ibid.

[7]Chichilnisky, G., Heal, G., & Beltratti, A. (1995). The Green Golden Rule. *Economic Letters 49*, p. 176.

[8]Figuières, C. & Tidball, M. (2012). Sustainable exploitation of a natural resource: a satisfying use of Chichilnisky's criterion. *Economic Theory*, *49*(2), p. 243.

[9]Ibid.

[10]Ibid.

However, the reflection base of the Golden Rule may also be considered its greatest flaw in today's increasingly diversifying global society. The Golden Rule automatically assumes that others want to be treated the way we do. While this assumption may have worked in times when societies were still homogeneous, it may represent a great setback in our current culturally diverse communities, in which others may have different treatment preferences. In light of sustainability, a person who does not consider destruction and pollution of environments and living beings a problem might encourage others to join his or her actions.

The Golden Rule is also strongly individualistic oriented, as it focuses solely on the interaction between one individual and another person or group. It excludes a holistic view that considers median and broad consequences. While it aims to facilitate greater reciprocity between parties, it fails to incorporate the growing interdependency between all constituents on the globe. The Golden Rule might specifically be questioned in its call to "treat others like oneself," for the fact that "oneself" may have distorted perspectives and wish to be treated in ways that are commonly unacceptable, which illustrates that the perspective of self-reflection is one that should be handled with appropriate caution. Burton and Goldsby (2005) quote moral analysts Gensler and Wattles, who both feel that using the Golden Rule "requires a certain level of moral maturity and openness to moral growth."[11] Burton and Goldsby subsequently list a number of criticisms to the Golden Rule among which, (a) differences in taste: others may want to be treated differently than you; (b) withholding penalization where it is necessary, because one would not want to be penalized; and (c) reflecting and acting upon non-conformist desires and assuming that others maintain those as well.[12]

When projecting the application of the Golden Rule onto the business environment, Burton and Goldsby (2005) raise the criticism that "stakeholders often have conflicting desires and may have conflicting needs."[13] As mentioned earlier in this chapter, it was exactly this discernment that resulted in the creation of the Platinum Rule. Conclusively reviewing human behavior from a global perspective, Burton and Goldsby (2005) critique, "The [Golden] rule easily fits into the perspectives of nearly every society, as is seen from the multitude of sources from around the world that quote a formulation of the rule approvingly" (p. 377). These authors subsequently contend, "But it does not mandate a certain treatment of others, unless that treatment is agreed upon by all people holding their differing perspectives. Because of this, it can't be put forward as a global ethic in itself."[14]

---

[11]Burton, B.K. & Goldsby, M. (2005). The golden rule and business ethics: an examination. *Journal of Business Ethics 56*(4), p. 374.

[12]Ibid.

[13]Burton, B.K. & Goldsby, M. (2005). The golden rule and business ethics: an examination. *Journal of Business Ethics 56*(4), p. 376.

[14]Burton, B.K. & Goldsby, M. (2005). The golden rule and business ethics: an examination. *Journal of Business Ethics 56*(4), p. 377.

Universalism

The universalist approach, as it is most frequently discussed in our times, was mainly developed by Immanuel Kant, a German philosopher who lived in the eighteenth century (1724–1804). Universalism is considered a deontological or duty-based approach.[15] Strict and responsible by nature and through education as well as the way he was raised; Kant's philosophy was centered on human autonomy. The notion of autonomy should be interpreted here as formulating our own law on basis of our understanding and the framework of our experiences. Being self-conscious, thus aware of the reasons behind our actions, is therefore one of the highest principles of Kant's theoretical philosophy.[16] Kant felt that one's moral philosophy should be based on autonomy. In his opinion, there should be one universal moral law, which we should independently impose onto ourselves. He named it the "categorical imperative."[17]

The categorical imperative holds that every act we commit should be based on our personal principles or rules. Kant refers to these principles or rules as "maxims." Maxims are basically the "why" behind our actions. Even if we are not always aware of our maxims, they are there to serve the goals we aim to achieve. In order to ensure that our maxims are morally sound, we should always ask ourselves if we would want them to be universal laws. In other words, would our maxim pass the test of universalizability? Within the framework of the categorical imperative, a maxim should only be considered permissible if it could become a universal law. If not, it should be dismissed.[18] "Kant also emphasized the importance of respecting other persons, which has become a key principle in modern Western philosophy. According to Kant, 'Act so that you treat humanity, whether in your own person or that of another, always as an end and never as a means only'."[19] Shining some clarifying light on the above, the categorical imperative can be considered as consisting of two parts: (1) We should only choose for an act if we would want every person on earth, being in the same situation as we currently are, to act in exactly the same way, and (2) We should always act in a way that demonstrates respect to others and treats them as ends onto themselves rather than as means toward an end.[20] A swift and effective way to measure the moral degree of our

---

[15]Weiss, J.W. (2009). *Business Ethics: A Stakeholder & Issues Management Approach.* South-Western Cengage learning, Mason, OH.

[16]Rolf, M. (Fall 2010). Immanuel Kant. *The Stanford Encyclopedia of Philosophy.* Edward N. Zalta (ed.). Retrieved on July 18 2013 at http://plato.stanford.edu/entries/kant/.

[17]Marques, J. (2015). Universalism and Utilitarianism: An Evaluation of Two Popular Moral Theories in Business Decision Making. *The Journal of Values-Based Leadership, 8*(2), Article 3. Available at http://scholar.valpo.edu/cgi/viewcontent.cgi?article=1124&context=jvbl.

[18]Rolf, M. (Fall 2010). Immanuel Kant. *The Stanford Encyclopedia of Philosophy.* Edward N. Zalta (ed.). Retrieved on July 18 2013 at http://plato.stanford.edu/entries/kant/.

[19]Johnson, C. (2012). *Meeting the Ethical Challenges of Leadership: Casting Light or Shadow* (4th ed.). Sage Publications, Thousand Oaks, CA, p. 159.

[20]Weiss, J.W. (2009). *Business Ethics: A Stakeholder & Issues Management Approach.* South-Western Cengage learning, Mason, OH.

maxims is to consider ourselves or a dearly loved one at the receiving end of our actions: would we still want to apply them? If not, then we should rethink them.

Strengths and weaknesses of universalism. The most obvious strength of universalism is its consistency. With this moral approach, there is no question about the decision to be made: what is right for one should be right for all. This takes out any emotional considerations and guarantees a clearly outlined modus operandi.[21] Within the sustainability context, this approach could be an important wake-up call if considered in-depth: corporate leaders who reflect on using less fortunate individuals as mere means toward their ends might change their actions. Similarly, they may reflect on whether they would want to be on the receiving end of their pollution activities or their massive extraction of natural resources at meager remunerations from those in financially needy positions, reconsider their actions, and start doing the right thing.

Another major strength of universalism is the fact that this moral theory focuses on the _intentions_ of the decision maker, thus making him his own moral agent, and motivating him to practice respect for those he encounters in his decision-making processes. Furthermore, the reflective element in this theory, evoking a deep consideration for the well-being of all parties involved in our actions, exalts its moral magnitude. Tying universalism to benevolence, and entrenching these self-transcending behaviors to the scope of sustainability, Hedlund (2011) affirms,

> Universalism includes altruism toward humankind and comprises values such as equality, social justice, and peace on earth, whereas benevolence encompasses altruism toward in-groups (primarily kins) and includes values such as being helpful, forgiving, and responsible […]. These value types have been shown to have a positive relationship with pro-environmental attitudes and behavior.[22]

In the same vein, Yang (2006) makes a strong stance in favor of universalism and the fact that universality of moral values should exist. Yang affirms, "Moral requirements have a special status in human life. […] If one who has moral sentiments at all fails to act on them, one will feel guilty, regretful, or ashamed. Moral requirements are the most demanding … standards for conduct, for interpersonal and intercultural criticism."[23]

The foundational guideline in universalism to make others an end onto themselves instead of a means toward our ends reminds us somewhat of the Golden Rule, which states that we should not do unto others what we would not have done unto ourselves (see earlier in this chapter). The Golden Rule, however, could be considered as having a narrower focus than the universalist approach, since it only

---

[21]Marques, J. (2015). Universalism and Utilitarianism: An Evaluation of Two Popular Moral Theories in Business Decision Making. _The Journal of Values-Based Leadership, 8_(2), Article 3. Available at http://scholar.valpo.edu/cgi/viewcontent.cgi?article=1124&context=jvbl.

[22]Hedlund, T. (2011). The impact of values, environmental concern, and willingness to accept economic sacrifices to protect the environment on tourists' intentions to buy ecologically sustainable tourism alternatives. _Tourism and Hospitality Research, 11_(4), p. 279.

[23]Yang, X. (2006). Categorical Imperatives, Moral Requirements, and Moral Motivation. _Metaphilosophy_, _37_(1), pp. 127–128.

considers immediate stakeholders, while universalism urges us to think in terms of universalizability. Moyaert (2010) shares the opinion that Kant's categorical imperative can be seen as "a further formalization of the golden rule."[24]

The fact that intentions are more important than outcomes in universalism also emphasizes its noble foundation. While we cannot influence the outcomes of our actions, we can, after all, always embark upon their realization with the best of intentions.

When considering the weak areas of universalism, it is first and foremost the aspect of universalizability that raises concern within the opponents of this approach: How possible is it, they claim, to consider all people, all nations, all beliefs, and all cultures in every single act we implement? In addition, the equality based approach, which universalism proclaims, is an ideal one, but not a very realistic one in today's world. While a good point could be made in favor of ending unfair treatment of those who are already privileged, there is a serious weakness to be detected if we start applying equal treatment when we want to restore an existing imbalance. By utilizing the universalist approach at all times, we would not be able to correct existing imbalances, simply because universalism does not condone a more favorable approach to anyone, hence not even to those that are oppressed and subjugated. Similarly, it does not support a less favorable treatment of anyone, hence not even those that have been unfairly privileged in past centuries.

Contemplating the major moral issue of human rights, Kim (2012) raises an important question by comparing the Divine Command theory, which proposes a universalist approach based on religious rulings, with Kant's categorical imperative, which proposes this same approach based on autonomy.[25] What makes one more acceptable than the other if they are both aiming for universal application? The fact that non-Muslims become uncomfortable when a Muslim scholar claims that Islam has formulated fundamental rights for all of humanity, and that these rights are granted by Allah, should be a clear indication that there could be opponents to any universal law, formulated by any group or individual at any time. "The question here is whether two conflicting justifications that appeal to different foundations of human rights (divine command and autonomy) should strengthen or weaken our confidence in the universality belief."[26] In Kant's favor, Robertson et al. (2007) point out that the notion of autonomy assumes a rational person's capacity for free moral choice made in the spirit of enlightenment. They defend universalism as being secular and rational, free from superstition or divine commands, void of emotions or filial bonds,

---

[24]Moyaert, M. (2010). Ricœœur on the (Im)Possibility of a Global Ethic Towards an Ethic of Fragile Interreligious Compromises. *Neue Zeitschrift Für Systematische Theologie Und Religionsphilosophie*, *52*(4), p. 455.

[25]Kim, E. (2012). Justifying Human Rights: Does Consensus Matter? *Human Rights Review*, *13*(3), 261–278.

[26]Ibid, p. 263.

and centered on doing the right thing for the right reasons.[27] On the other hand, however, Robertson et al. admit that universalism, as Kant defined it, is void of compassion, as it mainly focuses on fulfilling a responsibility.[28] Indeed, rigid and consistent at its core, the universalist approach does not leave room for flexibility. What is right is right and what is wrong is wrong: no negotiation possible. This stance can become problematic when situations occur with conflicting duties among involved parties, because in such cases a mutually gratifying solution is impossible to attain.

The intention-based focus of universalism may not always lead to desired outcomes and may leave unwanted victims down the line. This could be seen as an unwelcome side effect of a generally well-considered moral approach. No one enjoys disastrous outcomes, even if intentions were good. Universalism may therefore not always be the most desired mindset, depending on what is at stake.

Utilitarianism

Utilitarianism is a form of consequentialism, which entails that the end result (the "consequence") should be the most important consideration in any act implemented. The consequentialist approach therefore forms a stark contrast with the deontological (universalist) approach discussed earlier, because universalism focuses on intentions rather than outcomes, while consequentialism, and therefore utilitarianism, focuses on outcomes rather than intentions.[29] "[W]hether an act is morally right [in this theory] depends only on consequences (as opposed to the circumstances or the intrinsic nature of the act or anything that happens before the act)."[30]

In general, utilitarianism holds the view that the action that produces the greatest well-being for the largest number is the morally right one. "In the utilitarian view, one ought to maximize the overall good—that is, consider the good of others as well as one's own good."[31] Using more economic oriented terms, Robertson et al. (2007) define utilitarianism as "a measure of the relative happiness or satisfaction of a group, usually considered in questions of the allocation of limited resources to a

---

[27]Robertson, M., Morris, K., & Walter, G. (2007). Overview of psychiatric ethics V: Utilitarianism and the ethics of duty. *Australasian Psychiatry*, *15*(5), 402–410.

[28]Ibid.

[29]Marques, J. (2015). Universalism and Utilitarianism: An Evaluation of Two Popular Moral Theories in Business Decision Making. *The Journal of Values-Based Leadership, 8*(2), Article 3. Available at http://scholar.valpo.edu/cgi/viewcontent.cgi?article=1124&context=jvbl.

[30]Sinnott-Armstrong, W. (Winter 2012). Consequentialism. *The Stanford Encyclopedia of Philosophy*. Edward N. Zalta (ed.), ¶3, Retrieved on July 19 2013 at http://plato.stanford.edu/archives/win2012/entries/consequentialism/.

[31]Driver, J. (Summer, 2009). The History of Utilitarianism. *The Stanford Encyclopedia of Philosophy*. Edward N. Zalta (ed.), ¶ 2. Retrieved on July 19 2013 at http://plato.stanford.edu/archives/sum2009/entries/Utilitarianism-history/.

population."[32] Two of the most noted utilitarian advocates, Jeremy Bentham (1748–1832) and John Stuart Mill (1806–1873, and a follower of Bentham), felt that "the good" needed to be maximized to benefit as many stakeholders as possible. Bentham and Mill are considered the classical utilitarians. They were major proponents of constructive reforms in the legal and social realm, which explains why they promoted the stance of "the greatest amount of good for the greatest number."[33] Bentham, for instance, was convinced that some laws were bad due to their lack of utility, which gave rise to mounting societal despondency without any compensating happiness. He felt, much to the surprise of many of his contemporaries, that the quality of any act should be measured by its outcomes. This was, of course, a very instrumental-based mindset, as it was mainly concerned with tangible results.

Due to Bentham's focus on the happiness levels of the largest group, there was a significant degree of flexibility embedded in the utilitarian approach. After all, whatever is considered a cause for general happiness today may not be seen as such tomorrow. Tastes, perceptions, needs, and social constructs change, and "the greatest good for the greatest number" may look entirely different tomorrow than it does today.[34]

Johnson (2012) posits that there are four steps to conduct a utilitarian analysis of an ethical problem: (1) Identifying the issue at hand; (2) Considering all groups, immediate and non-immediate, that may be affected by this issue; (3) Determining the good and bad consequences for those involved; and (4) Summing the good and bad consequences and selecting the option of which the benefits outweigh the costs.[35]

Weiss (2009) emphasizes that there are two types of criteria to be considered in utilitarianism: rule based and act based. Rule-based utilitarians consider general rules to measure the utility of any act, but are not fixated on the act itself. As an example, while a rule-based utilitarian may honor the general principle of not stealing, there may be another principle under certain circumstances that serve a greater good, thus override this principle. Act-based utilitarians consider the value of their act, even though it may not be in line with a general code of honor.[36] If, for instance, an act-based utilitarian considers a chemical in his workplace harmful for a large group of people, he may decide to steal it and discard it, considering that he

---

[32]Robertson, M., Morris, K., & Walter, G. (2007). Overview of psychiatric ethics V: Utilitarianism and the ethics of duty. *Australasian Psychiatry*, *15*(5), p. 403.

[33]Driver, J. (Summer, 2009). The History of Utilitarianism. *The Stanford Encyclopedia of Philosophy*. Edward N. Zalta (ed.), ¶ 3. Retrieved on July 19 2013 at http://plato.stanford.edu/archives/sum2009/entries/Utilitarianism-history/.

[34]Marques, J. (2015). Universalism and Utilitarianism: An Evaluation of Two Popular Moral Theories in Business Decision Making. *The Journal of Values-Based Leadership, 8*(2), Article 3. Available at http://scholar.valpo.edu/cgi/viewcontent.cgi?article=1124&context=jvbl.

[35]Johnson, C. (2012). *Meeting the Ethical Challenges of Leadership: Casting Light or Shadow* (4th ed.). Sage Publications, Thousand Oaks, CA.

[36]Weiss, J.W. (2009). *Business Ethics: A Stakeholder & Issues Management Approach.* South-Western Cengage learning, Mason, OH.

saved a large group of people, even though he engaged in the acts of stealing and destroying company property.

   Strengths and weaknesses of utilitarianism. The most important appeal of the utilitarian approach is its focus on the well-being of the majority, thus ensuring a broadminded, social approach to any problem that arises. This theory also overrules selfish considerations and requires caution in decision-making processes, with a meticulous focus on the possible outcomes. If, therefore, applied in a morally sound and in-depth considered way, a utilitarian mindset may benefit a sustainable approach, because it will consider the greatest good for the greatest number, which is wellness for the majority of living beings in the world.

   In addition, the flexibility that is embedded in this approach makes it easy to reconsider and adjust decision-making processes based on current circumstances. As we live in an era where flexibility is the mantra for succeeding, utilitarianism seems to be a solid way of ensuring that needs are met with consideration of the needs and desires of all stakeholders. Robertson, Morris, and Walter (2007) underscore this as follows: "The advantages of utilitarianism as an ethical theory lie in its intuitive appeal, particularly in the case of 'act utilitarianism,' and its apparent scientific approach to ethical reasoning."[37]

   In regard to the weaker areas of utilitarianism, the following can be remarked: When adhering to the utilitarian (consequentialist) approach, one should be willing to let the general welfare prevail, thus be ready to denounce personal moral beliefs and integrity in case these are not aligned with what is considered "the overall good." Volkman (2010) raises a strong point to ponder in this matter: "One's integrity cannot be simply weighed against other considerations as if it was something commensurable with them. Being prepared to do that is already to say one will be whatever the utilitarian standard says one must be, which is to have already abandoned one's integrity."[38] Illustrating the moral dilemma that may rise between a potentially questionable "common good" and one's personal moral beliefs, Robertson et al. (2007) discuss the so-called replaceability problem. Within the utilitarian mindset, it would be preferable to kill one healthy person in order to provide transplant organs for six others, or to kill one man in order to save dozens of others.[39]

   Aras and Crowther (2007) add to the concerns of a utilitarian approach toward sustainability by pointing out that the utilitarian view proposes maximization of societal utility through a summative process. This creates ample room for the emergence of a situation "whereby a large increase in utility for a small number of people offsets the small reduction in utility for a very large number of people to show a net increase in utility for society, although all the benefit is accrued to the

---

[37]Robertson, M., Morris, K., & Walter, G. (2007). Overview of psychiatric ethics V: Utilitarianism and the ethics of duty. *Australasian Psychiatry*, *15*(5), p. 404.

[38]Volkman, R. (2010). Why Information Ethics Must Begin with Virtue Ethics. *Metaphilosophy*, *41*(3), p. 386.

[39]Robertson, M., Morris, K., & Walter, G. (2007). Overview of psychiatric ethics V: Utilitarianism and the ethics of duty. *Australasian Psychiatry*, *15*(5), 402–410.

few"[40] (p. 60). Aras and Crowther (2007) clarify that the power imbalances prevalent in society are ignored in any utilitarian analysis, which make the above described problem inevitable, thus representing one of the major flaws with the capitalist system.[41]

Another point of caution within the utilitarian approach is its outcome focus: while the end result may be considered admirable for any decision, there is no guarantee that an act will actually generate a desired outcome. Life is unpredictable, and with the growing complexity of our current work environments, there may be many factors we overlook. This can lead to undesired outcomes that backfire, regardless of the initial focus. If, for instance, a manager decides to layoff three employees to reduce overhead and save the livelihood of twenty other workers, he may find that several of the twenty remaining workers either become demoralized and less productive as a result of this decision, or even resign if they have the opportunity to do so. Similarly, a corporate leader could decide to dump toxic waste in a thinly populated part of the world in favor of the more heavily populated parts. This may seem like a desirable outcome for the majority, but the consequences remain catastrophic in the long term.

In addition, utilitarianism is an individual perception-based approach. Depending on the magnitude of factors involved, it may occur that different utilitarian decision makers come to different conclusions and make entirely different outcomes, based on the angle from where they perceived the issue at hand. One manager may, for instance, conclude that using secret data from a competitor brings the greatest good for the greatest number in focusing on his workforce, leading him to use the data; while another manager may find that using this secret data will negatively affect the well-being of the much larger workforce of his competitor, leading him not to use it.

The Ethics of Sustainability

While sustainability and ethics are often considered two entirely different subjects, there is a clear and abundant interdependence between these two phenomena. While each of these two concepts is expansive and encompasses a wide range of social conducts in a variety of disciplines, it remains an undisputable fact that nurturing a sustainable pattern of behaving requires an ethical mindset, just as much as harboring an ethical mindset emboldens increased sustainable actions. Betts (2009) first explains sustainability as follows: "Sustainability implies that the system, activity or resource is able to stay as it is or grow and develop without undesired

---

[40]Aras, G., & Crowther, D. (2007). What level of trust is needed for sustainability? *Social Responsibility Journal, 3*(3), p. 60.

[41]Aras, G., & Crowther, D. (2007). What level of trust is needed for sustainability? *Social Responsibility Journal, 3*(3), pp. 60–68.

changes or depletion."[42] Subsequently bringing ethics into the scope, Betts continues, "[A]ny basis for ethical decision making must be one that has sustainability as one of its main explicit concerns or implicit outcomes."[43] By introducing Garrett Hardin's 1968 article "Tragedy of the commons," Betts illustrates his stance with a simple example of 100 sheep, owned by 100 people, grazing on a piece of land. All remains well until a 101st sheep arrives. This may not seem to be a problem at first, but ultimately the grazing land, unless expanded in size, will be lose its capacity to recover, and cease feeding any sheep in the end. Betts subsequently presents some examples of today's well-known unsustainable practices, such as overexploiting fisheries, the labor market, and the global climate, thereby underscoring that a sustainable approach would ensure renewal processes to safeguard—and possibly increase—available, finite resources, while an unsustainable approach merely leads to depletion. He reminds us of decades of corporate depletion of resources for production and the effects this had on "the global climate, local environmental, renewable resources (soil, fisheries, forests), finite resources (minerals, petroleum), and even social resources such as the labor supply and infrastructure."[44] Ethical behavior prescribes that businesses should engage in sustainable behavior.

Profitability While Being Ethical and Sustainably Responsible

A question that remains at the forefront of corporate interests is whether it is possible to do the right thing, in this case being sustainability conscious, and still be profitable. The answer is an enthusiastic "yes!" The shift that business leaders will have to make in order to achieve this is to move from the restricted theory of maximizing stockholder wealth to the all-inclusive stakeholder approach. This approach acknowledges that a wide range of groups and individuals have a stake in the organization and focuses organizational activities toward inclusion of and communication with these groups. Stakeholder groups comprise of "customers, suppliers, employees, the local community, competitors, and a host of others [that] are affected by the operations of a business."[45] Fortunately, we find that, with the abundance of connectivity and expanded infrastructural alternatives at our disposal, corporate leaders and quality professionals have become increasingly aware of the moral duty that is embedded in performing socially responsible thus more sustainability conscious, from considering the environment to selecting their suppliers,

---

[42]Betts, S.C. (2009). An Examination of the Interdependence of Ethics and Sustainability: Why Sustainability is the Ethical Choice. *Allied Academies International Conference. Academy of Legal, Ethical and Regulatory Issues. Proceedings, 13*(1), p. 15.

[43]Ibid.

[44]Ibid, p. 16.

[45]Betts, S.C. (2009). An Examination of the Interdependence of Ethics and Sustainability: Why Sustainability is the Ethical Choice. *Allied Academies International Conference. Academy of Legal, Ethical and Regulatory Issues. Proceedings, 13*(1), p. 17.

from managing their production to operating fairly in the market, and from treating their workforce well to honoring their direct and indirect stakeholders.

Case Review: IKEA's Sustainable Approach

IKEA, the Swedish furniture company with a global presence, has been known for quite some time for its socially responsible and sustainability-aware approach, not only in regard to its production lines, but in all aspects of its operation. For several decades now, the company has been active in sustaining social resources. The company has set out to support vulnerable groups to strengthen themselves and become economically and socially self-reliant. IKEA is also very vocal about banning child labor and is strongly involved in UNICEF projects, but also in self-initiated endeavors. For example, in the early 1990s, the company's representatives became aware of the serious impact of child labor trends in the carpet weaving belts of India. This trend seriously threatened the advancement of upcoming generations in villages, since schools remained empty, as children were working all the time. Merely funding schools was a useless endeavor, as could be seen from the many sponsored but empty school buildings in those days. In response to this concerning trend, IKEA developed the "Carpet Project" in 2000, a creative solution of enabling the child laborer's low-caste mothers to form self-help groups and pay off the loan sharks, upon which they could place their children back in school to obtain a decent education and have a chance on a better future.[46]

A review of IKEA's 2014 sustainability report highlights a variety of ways in which the company maintains its socially responsible mindset. Seven decades of continuous improvement and focus on doing the right thing have led IKEA to become a leading global force in all elements of social responsibility (SR): from granting major donations to children, women, refugees, and other vulnerable groups, to developing a "People and Planet Positive strategy" in which customers, co-workers, suppliers, and other stakeholder groups are carefully considered within the company's ongoing developments.

IKEA remains alert about the resources it uses. It has strong and clear policies on reducing waste, applying energy efficiency, and delivering energy efficient products. The company invites co-workers' and customers' input in new product developments, encourages co-workers to engage in sustainability movements, complies with forestry standards, and ensures that suppliers do the same. In fact, IKEA has been working steadily toward deforestation and has established partnerships with sustainability focused global entities, while also focusing on product safety, reducing the company's carbon footprint and inspiring co-workers to do the same. IKEA has not stopped with educating and involving its suppliers: the company is also

---

[46]Luce, E. (Sept. 15, 2004). Ikea's plan to tackle child labour: CORPORATE SOCIAL RESPONSIBILITY: The Swedish retailer is supporting schools in India's carpet belt in a commercially sound way. *Financial Times [London (UK)]*, 14.

working toward empowering people within the company's extended supply chain to create better lives for themselves. IKEA admits, learns, and improves from past mistakes.[47]

With all its sustainability and SR activities, IKEA has managed to remain a leader in its industry. The company has about 154,000 employees, with 47 % of its management team consisting of women, and 338 stores globally. IKEA meets one-third of its energy consumption with renewable energy. The company has a strategy with a set of ambitious sustainable goals such as reaching 100 % of its energy from renewable sources by 2020, but the workforce enthusiasm to make these goals reality is present. With more than 50,000 solar panels and an aim to invest $2 billion in renewable energy on the short term, IKEA can be seen as a forerunner in setting the sustainable bar high. The company closely examines all its stakeholder relations, and has been strengthening ties with suppliers who shared the sustainability vision during the past years, while discontinuing relationships with those who did not care for a more sustainable approach. IKEA has also stepped up its consumer communications. The company's leadership is strongly aware of the overutilization of global resources and is intensely collaborating with its stakeholders to improve.[48] *It works. IKEA manages to remain a hugely profitable corporation while increasing its sustainability performance all the time. IKEA demonstrates that it is possible to be ethical, be sustainability-responsible, and make decent profits.*

In 2015, IKEA Switzerland, with its 3000 co-workers, became the first company worldwide to achieve "LEAD," the premier certification of EDGE, a global standard for gender equality. EGDE assessed IKEA's Swiss operations on basis of equal pay for equivalent work, recruitment and promotion, leadership development training and mentoring, and flexible working and company culture.[49]

Summary

- Due to the ongoing threat to our renewable, finite, and social resources, especially from corporate activities, the International Organization for Standardization (ISO) launched an international standard, ISO 26000, emphasizing social responsibility (SR) toward global sustainable development.

[47]*IKEA Group Sustainability Report*, FY14. Available online at http://www.ikea.com/ms/en_US/pdf/sustainability_report/sustainability_report_2014.pdf.

[48]Singh, A. (7 Feb 2013). Ikea: Sustainability and Profitability: Two Ends of the Same Stick. *Forbes*. Available at http://www.forbes.com/sites/csr/2013/02/07/ikea-sustainability-and-profitability-two-ends-of-the-same-stick/.

[49]Dunn, J. (Sept. 29, 2015). IKEA Switzerland is the first company worldwide to reach highest level of gender equality certification from EDGE. *PR Newswire Europe Including UK Disclose.*

- A comprehensive SR framework includes core elements of human rights, labor practices, the environment, fair operating practices, consumer issues, community involvement and development, and organizational governance.

- The Golden Rule suggests that we should "Do unto others as you would have them do unto you." The business world oftentimes uses the Golden Rule as a guideline in internal and external organizational practices.

  - The Green Golden Rule, GGR, is a sustainability based extension to an earlier developed "Golden Rule of Economic Growth," and aims to be sensitive to the welfare of the very long-run generations, as well as to the welfare of both the present and the finitely distant generations.

- The universalist approach assumes that one's moral philosophy should be based on autonomy. It holds that every act we commit should be based on our personal principles or rules and should be willed to serve as a universal rule.

  - Universalism includes altruism toward humankind and comprises values such as equality, social justice, and peace on earth, which maintains a positive relationship with pro-environmental attitudes and behavior.

- Utilitarianism entails that the end result should be the most important consideration in any act implemented. This approach forms a stark contrast with the universalist approach, because universalism focuses on intentions rather than outcomes.

  - A major concern of the utilitarian approach toward sustainability is that it proposes maximization of societal utility through a summative process. This creates ample room for the emergence of a situation whereby a large increase in utility for a small number of people offsets the small reduction in utility for a very large number of people to show a net increase in utility for society, although all the benefit is accrued to the few.

- Ethics and Sustainability are interdependent: nurturing a sustainable pattern of behaving requires an ethical mindset, just as much as harboring an ethical mindset emboldens increased sustainable actions.
- Being ethical and sustainably responsible is positively related to profitability. The shift that business leaders will have to make in order to achieve this is to move from the restricted theory of maximizing stockholder wealth to the all-inclusive stakeholder approach. This approach acknowledges that a wide range of groups and individuals have a stake in the organization and focuses organizational activities toward inclusion of and communication with these groups.

Interactive Discussion Questions

1. Review the three moral stances discussed in this chapter and discuss which of these stances appeals most to you and why?
2. Consider the seven core elements of Social Responsibility. Select one of these elements and discuss it in light of the practices of a company of your choice.
3. Consider the two maxims of the Green Golden Rule (GGR): what is your interpretation of these maxims? Do you think they are realistic? Please explain.
4. Consider the universalist approach. Do you believe that universal rules are possible in regards to sustainability? Please explain in about 200 words?
5. Do you believe business corporations can be truly profitable while being socially responsible? Please support your stance.

The Environment is a Moral and Spiritual Issue

4

John E. Carroll

Abstract

The fact that the environment and environmental issues are moral and spiritual issues has been strongly reinforced by the release of Pope Francis' encyclical, *Laudato Si: On Care for Our Common Home*. Defining environmental questions in this way is not new, dating at least from the philosophical writings of Aldo Leopold in the United States and his famous "land ethic" essay, published in 1948. My own four earlier books in the last two decades, *Embracing Earth*, *The Greening of Faith*, *Ecology and Religion*, and *Sustainability and Spirituality*, have focused, in their entirety, on the moral, spiritual, and human values aspects of environmentalism, including the issues of intergenerational equity and social justice. But Pope Francis has raised the bar substantially on all such issues, and many around the world will now see climate change, biodiversity, agricultural practice, and other environmental questions in light of moral values and spirituality. Given the global spotlight on the encyclical, it is important to understand its content, point by point, in order to better understand its implications, as it begins to influence and perhaps even drive the global debate beyond narrower questions of science, economics, and politics. This chapter performs that task. Anyone who has never seen the environment as a moral and spiritual issue, now, thanks to Pope Francis, has a reason to—and a way to as well. The widely praised, somewhat reviled, and much discussed papal

---

Laudato Si—"Praise be to you, my Lord" in medieval Italian—takes its title from St. Francis of Assisi's 13th century *Canticle of the Sun*, one of whose verses is "Be praised, my Lord, through our sister Mother earth, who feeds us and rules us, and produces various fruits with colored flowers and herbs." The thought and teaching of the Pope's namesake, St. Francis of Assisi, underlies the entire document, as does the notion that earth (nature) both feeds us and rules us.

J.E. Carroll (✉)
University of New Hampshire, Durham, NH, USA
e-mail: carroll@unh.edu

encyclical, *Laudato Si: On Care for Our Common Home*, issued on June 18, 2015, and consisting of 184 pages, lays out a comprehensive and well-integrated approach, in fact the only realistic approach to addressing the environmental challenge at hand. The environmental challenge we face is daunting and complex, and the encyclical provides a method for approaching it that matches the magnitude of the challenge. The goal of this chapter was to introduce the encyclical to a wider audience and give the audience a taste of its content—as well as to make the point that the encyclical is now a central argument in our consideration of climate change in particular and environmental issues in general. The importance of this document should not be underestimated.

Our Environmental Problem

Some think of the environmental crisis as a scientific problem, some think of it as an economic problem, and some see it as a political problem, but I see the environmental crisis as a problem of values. Having taught American environmentalism in the university classroom from the movement's inception in the late 1960s, from the time of the infamous Santa Barbara oil spill to the present, I can attest that environmental questions are not, at their core, scientific questions, economic questions, or political questions. They are ultimately questions of moral choice, with deep spiritual ramifications. If, in the end, environmental questions are human values questions, as I discussed in my own four earlier books on this subject, Embracing Earth (LaChance 1994), The Greening of Faith (Carroll et al. 1997), Ecology and Religion (Carroll 1998), and Sustainability and Spirituality (Carroll 2004), then it follows naturally that nothing less than a change in human values can adequately address them. However, as the continuing degradation of our planetary home suggests, such a change has not been forthcoming. All the scientific research, economic analysis, and political debate that have taken place have not solved the problem because, in the end, they cannot solve the problem. This is what I have been teaching in the classroom for many years, and this is what Pope Francis is helping us to see. Pope Francis is not the first pope to communicate this message, but he is certainly the clearest, the most vocal, and the most unequivocal.

Pope Francis' encyclical, *Laudato Si*, echoes the thinking of many influential ecological thinkers who have shaped the direction of the environmental movement. In fact, portions of it could have been written by Aldo Leopold ("The Land Ethic"), Rachel Carson (*Silent Spring*), Wendell Berry (*The Unsettling of America*, and *What Are People For*?, and many other books), and Thomas Berry (*Dream of the Earth*, *The Universe Story*). It also reflects the thinking of economic philosopher E. F. Schumacher (*Small is Beautiful: Economics as if People Mattered*, *Good Work*, *A Guide for the Perplexed*), and philosopher Arne Naess, founder of "Deep Ecology." As brilliant as these writers were and are, Leopold, Carson, Wendell Berry, Thomas Berry, E.F. Schumacher, and Arne Naess did not succeed in their

goals, if one judges from the status of the planet today. Pope Francis has embraced their thinking (something I never thought I would see a pope do), and he has even taken it to a higher level. The question at hand is, will he succeed? Will Pope Francis break the mold? How indeed ironic that the world has warmed to this man from Argentina, this former barroom bouncer, amateur boxer, industrial chemist, this man of the cloth, this Jesuit priest, this Catholic prelate, and now this pope.

The Encyclical: The Document that Makes a Difference

Many outside the Catholic Church—and perhaps more than a few in the Church—may wonder just what a papal encyclical is. In short, it is an official document of one very large and very old institution, the global Roman Catholic Church, but it is not a collective document of that institution. Essentially, it is the document of an individual, the Pope, who bears sole authorship and responsibility for its content. However, following its release, a papal encyclical holds official status as a document of the institution, and it applies to all of the Church's members. It is essentially a letter to the cardinals, bishops, and priests of the Church, as well as to the men's and women's religious orders, and it constitutes a directive to them to teach the Church membership on the topic it treats and to follow its direction. As a directive, the encyclical is not a suggestion but an imperative. For Catholics, following the encyclical is not optional because it constitutes an official articulation of Church teaching.

An encyclical holds no authority over any institution or population outside the Catholic Church, and yet the global community has responded to this encyclical as relevant. *Laudato Si* has found resonance with Buddhists, Hindus, the followers of other Eastern philosophies and spiritualities; with practitioners of indigenous peoples' spirituality; with Jews, Muslims, Protestant and Orthodox Christians; as well as with atheists and agnostics. It has also found resonance with people of Catholic background who have left the Church over political disagreements or as a response to the Church's internal corruption. They interpret the encyclical as a statement of moral principle that, in dealing with the topics of sustainability and spirituality, transcends a specific religious tradition. For them, the encyclical is a central voice in the ongoing and critically important global dialogue about the nature of sustainability and its relationship to spirituality. And, when it deals, as *Laudato Si* does, with sustainability and spirituality, with the relationship of human beings to the rest of nature, it becomes a central piece of the human dialogue, the human debate, on the nature of sustainability and its relationship to spirituality. It is, therefore, as relevant to humanity as a whole as it is to Catholic Christians, and possibly even more so. And it is immediately in the center of the global sustainability debate. (In fact, there are Catholics themselves who may find fault with the encyclical and be in some disagreement with it, while many non-Catholics may actually find themselves in greater alignment with its meaning—or at least be very curious about it.)

So, What Do We Learn From the Papal Encyclical?

Laudato Si is so strongly written and appears so "radical" in many respects that there are some, Americans in particular, who wonder whether the Church has changed its mind on basic doctrine. How could the vision of an ancient and staid conservative institution seemingly change so suddenly and dramatically, especially one that many complain moves at a turtle's pace, if not even slower? But I would ask, has it indeed changed, or are we now hearing the voice of the non-Western Church, the voice of many millions of Catholics in South America, Africa, and Asia—particularly the global South—asserting their worldview? Perhaps there is no change in the Church at all—just a pent-up release that is now beginning to show itself. The Catholic Church has always considered itself to be a global and universal institution, but the makeup of its leadership, as well as its behavior, has thus far been anything but global. The leaders who set direction for the Catholic Church have always been European, including their North American counterparts, people with European psyches and Western values. We are now witnessing the emergence of more authentic globalism and, in this globalism, one finds a truer representation of the masses who make up the Church's membership, including masses in poverty with a very different outlook on life.

Because *Laudato Si* represents something more than a Western worldview, it offers a new way of seeing and a new way of knowing that transcends the actual contents of the text. This new way of seeing (which is actually a very old way of seeing) is fundamentally ecological, and it provides an occasion for a new way of knowing nature and understanding our own place in it.

Laudato Si is not only rooted in and representative of the non-Western Catholic Church, but it builds on a foundation laid by the recent catechisms (teaching manuals) produced by bishops' conferences over the past thirty years and by popes from the 1970s to the present. As an example of ecological thought embedded in the institution, the "*Baltimore Catechism*," basic teaching document of the Catholic Church in America for more than a century, as well as its recent successor, the *Catechism of the Catholic Church*, asks the simple question of both children and adults, "Where is God?" And it answers "God is everywhere." Everywhere means everywhere: throughout all of nature as well as in that portion of nature known as humanity. The question is radical and profound, and so is the answer. This thinking is counter to the way we view modern Western society interacting with the world and with nature. In fact, we behave as if we believe we are both separate from and above nature. Pope Francis in his encyclical brings us back down to earth, literally as well as figuratively.

So Francis' encyclical may not necessarily be all that radical a departure, even if it seems so. In fact, it appears not to be a departure at all. Perhaps, more accurately, it is a return. If God the Creator is everywhere, then, as the science of ecology tells us, every individual thing is connected to every other thing, both spatially and temporally. As secular scientist Barry Commoner has noted, since everything is connected to everything else, everything must go somewhere. Therefore, how we

interact with and treat the planet, our home, and how we treat the rest of nature, reverberates back to us and to all things. Everything that goes around, comes around. This understanding, which predates the encyclical, but which Francis cogently builds on in the encyclical, constitutes a rejection of how we have been living with technology and fossil fuels and how we have not been living with nature for several hundreds of years, and especially during the petroleum era. During the petroleum era of the past century and a half, cheap, abundant fossil fuel has enabled technology that separates us from nature and—more fundamentally—separates us from who we are, and this kind of separation is unsustainable. At its core, the encyclical rejects this separation and calls for us to return to living in community with creation. Nature knows best, and living in community with creation is its teaching.

As far back as the 1940s, the great American ecological ethicist and philosopher Aldo Leopold wrote, speaking of his own then (and today still) minority view: "We of the minority see a law of diminishing returns in progress … (T)his much is crystal clear: our bigger and better society is now like a hypochondriac, so obsessed with its own economic health as to have lost the capacity to remain healthy … Nothing could be more salutary at this stage than a little healthy contempt for a plethora of material blessings … The only thing … left out is whether the philosophy of industrial culture is not, in its ultimate development, irreconcilable with ecological conservation. I think it is."[1]

This is not something most Americans want to hear, even if it comes from an esteemed American. We continue to be so obsessed with a narrow view of progress that we move blindly forward to our demise.

Like Leopold, the Pope is calling for a societal shift away from profit, production, and power and toward people, place, and planet. Until now, lawyers, scientists, and economists have dominated the environmental discourse. Now we need poets, preachers, philosophers, and psychologists, as this Pope is making clear.

Case: A Tale of Two Global Documents
To gain a sense of how different this encyclical is from governing documents with similarly broad goals, one might compare the encyclical's thrust and contents with the United Nations' "Sustainable Development Goals" (SDGs). A team from the London School of Economics, led by Prof. Jason Hickel, has done precisely that, and they found that the document delineating the UN's Sustainable Development Goals paled in comparison with Pope Francis' Laudato Si. Specifically, the team found the SDGs to be staid, timid, and reflective of yesterday's thinking—not fresh or paradigm shifting. The team also found the SDGs to confuse lists with patterns and thoroughness with holism. Weaknesses of the UN approach, according to Hickel and his colleagues, include its support of GDP growth as a measure of human progress,

---

[1]Aldo Leopold, as related by James Gustave Speth, *Angels by the River: A Memoir* (Vermont: Chelsea Green Publishers, 2014), 88–89.

its detached acceptance of global poverty and inequality, and its failure to name the forces that cause human suffering and environmental destruction. The SDGs favor a status quo approach to solving environmental problems and resist real change or a new economy. And as if all of this weren't enough, the team found a distinct lack of excitement around the goals and their approach.

By contrast, Hickel and his colleagues found Pope Francis' encyclical bold, visionary, fresh, radical, and uncompromising. In their view, this is a zeitgeist document that is in tune with the times and represents a profound critique of our political economy, one that seeks to dethrone GDP growth as the measure of human progress and considers the economy and the environment as part of the same system. Hickel and his colleagues point out that the encyclical rejects business-as-usual fixes such as carbon trading and an economic model that relies on ever-increasing consumption, poverty, and ecological crisis caused by institutions with specific interests which must be named. Pope Francis is calling for a new economy and, in contrast to the UN's SDGs, people around the world have found themselves stirred by this call.

In sum, while the UN's SDGs are unwilling to face the problem, instead taking refuge in the status quo, Pope Francis' encyclical faces the problem squarely and unflinchingly, rejecting the status quo and calling for action, even if it means turning modern life upside down. Unfortunately, we no longer have the luxury of choosing the status quo. If we want to avert environmental disaster, the world cannot continue to function in the way that it has. The UN's SDGs, which are philosophically similar to goals documents of states, will not avoid catastrophe. The Pope's encyclical, however, offers real resolution as well as hope. The significant missing ingredients in the UN document are ethics, morality, and spirituality, and these are the very ingredients that make the papal encyclical a document of hope.

Case Questions:

1. *Why might government documents like the UN Sustainable Development Goals (SDGs) be considered staid, timid and reflective of yesterday's thinking? What makes Pope Francis' encyclical different?*
2. *Why do we need a paradigm change (as offered by Pope Francis' encyclical) rather than a status quo approach (as offered by the UN Sustainable Development Goals) (SDGs)?*
3. *What are the significant missing ingredients in the UN document?*

The Historic Encyclical in Depth: A Central Document in Spirituality and Sustainability

This section provides some detailed insight into the actual contents of the encyclical, point by point, using Pope Francis' own chapter headings and subheadings.[2]

Introduction

In his introduction to *Laudato Si*, Pope Francis, who frames the encyclical as a dialogue not just with Catholics or Christians but with all people, locates his teaching in the history of Church, demonstrating that his ideas are not new but that they build on those of his predecessors. St. Francis of Assisi, namesake of the Pope and to whom the pope devotes much attention in the encyclical, is the example, par excellence, of the "integral ecology" that the pope so strongly advocates. Francis also points to Ecumenical Patriarch Bartholomew, Patron of Ecology, with whom he hopes for nothing less than full ecclesial union. Patriarch Bartholomew of the Orthodox Church was the first Christian leader to conclude that anti-environment behavior is a "sin against creation." (One might go further and compare fossil fuel use and over-dependence on technology to the temptation of the apple in the Garden of Eden. Both are for us true temptations, even addictions.) In the spirit of Bartholomew, Pope Francis encourages us to seek solutions not only in technology but in a change in human values, asking us to replace consumption with sacrifice, greed with generosity, and wastefulness with a spirit of sharing.

Pope Francis also points to several previous popes as having advanced important environmental values. For instance, Papal recognition of the idea that we victimize ourselves by victimizing the environment dates from Pope Paul VI in 1971. Francis' predecessor, Pope Benedict XVI, recognized that we cannot analyze our world by isolating only one of its aspects because everything is interconnected, and thus, the deterioration of nature is inextricably linked to the culture that shapes our human coexistence. According to Benedict XVI, man is nature and is part of the greater whole. All ecologists would agree.

In his Introduction, Pope Francis points to not only popes who have laid a foundation for his thinking, but also Catholic and secular thinkers, rooting his discussion in the literature of environmentalism. He aligns with American environmentalist Rachel Carson in her call for us to unite with all that exists and engage an openness to awe and wonder. He also aligns with environmental philosopher Thomas Berry, who calls on us to view the world as a subject, not as an object, and who invites us to approach the world not as a problem to be solved but rather as a joyful mystery to contemplate.

---

[2]All words in quotation are Pope Francis' own words as they appear in the encyclical online at: http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enci-clica-laudato-si.html.

Building on popes and environmental thinkers, the Pope calls for a new dialogue, and these are the themes he proposes as points for discussion, and which he explores in the encyclical:

– The intimate relationship between the poor and the fragility of the planet;
– The conviction that everything in the world is connected (the first principle of ecology);
– A critique of the new paradigm and forms of power which are derived from technology, as often an enemy as a friend;
– The call to seek other ways of understanding the economy and progress;
– The value proper to each creature;
– The human meaning of ecology;
– The need for forthright and honest debate;
– The serious responsibility of international and local policy;
– The throwaway culture; and
– The proposal of a new lifestyle.

A key conclusion is that, not following this regimen, nature will turn against us. It already has to some extent, and we cannot win for we are only a small part of the whole.

Chapter One: What Is Happening to Our Common Home?

In Chapter One of the encyclical, Pope Francis tells us there is a problem of "rapidification": Human activity is now far too speedy for biological evolution and things are out of control. He argues that we must slow the pace of pollution, climate change, water use, loss of biodiversity, the decline in the quality of living, the breakdown of society, and the rise of global inequality. When it comes to pollution and climate change, he offers the following.
Pollution and Climate Change:

1. Technology is blind and cannot see the intricate, the mysterious network of relations between things—we solve one problem only to create many others.
2. Famously he wrote "The earth our home is beginning to look more and more like an immense pile of filth." This remark has been widely quoted.
3. He warns against the scientific concept of bioaccumulation in organisms, even at low toxicity levels, which results from both agricultural waste and industrial production, and that our industrial system does not have the capacity to absorb and reuse waste and byproducts.
4. Pope Francis recognizes climate as a common good, and that there is "a very solid scientific consensus on climate warming," rejecting the climate deniers and putting to rest any ideas to the contrary.
5. Humanity needs a change of lifestyle and in systems of production and consumption to combat climate warming.

6. Most global warming is from human activity deriving from two main causes: intensive use of fossil fuels and changed uses of the soil (i.e., deforestation for agriculture).
7. Those with wealth or power are not well meaning in that they want to mask the problem or conceal the systems.
8. We now have minimal access to clean and renewable energy—and we lack storage technology.

The Issue of Water:

1. Wasting and discounting the value of water has reached unprecedented levels in developed countries.
2. Francis is opposed to the sale of bottled water and writes "Access to safe drinkable water is a basic and universal human right, since it … is a condition for the exercise of other human rights."

Loss of Biodiversity:

1. All species have value in and of themselves. Thus, nature has intrinsic value in and of itself, separate from human.
2. He decries the extinction of plants and animals, says it's mainly human-caused, and that we have no such right to drive extinction.
3. He speaks on behalf of both uncommon and unseen species, recognizing the critical role they play in maintaining ecological equilibrium.
4. He demonstrates an extraordinary knowledge of the biological functioning of the ecosystem, indicating his own scientific mind. Many scientists have commented on this.
5. He recognizes that human intervention into nature is often in the service of business interests and consumerism, essentially profit-driven and not concerned with nature or its protection.
6. We believe in the myth that we can substitute "an irreplaceable and irretrievable beauty" with something we create ourselves. This is ultimate hubris. And no one looking for quick and easy profit is truly interested in ecosystem preservation or protection.
7. We must support greater investment in ecological scientific research.

Decline in the Quality of Human Life and the Breakdown of Society:

1. Environmental deterioration, current models of development, and the throw-away culture are linked as one.
2. Francis observes we were not meant to be inundated by cement, asphalt, glass, and metal, and deprived of physical contact with nature.
3. He sees the omnipresence of media and the digital world as an enemy, as "devices and displays" come to control our lives, preventing human wisdom, deep thinking, and love.

Global Inequality:

1. Our failure to blame "extreme and selective consumerism" is a way of refusing to face the issues.
2. He opposes the waste of food and remarks "Whenever food is thrown out, it is as if it were stolen from the table of the poor."
3. We depend on being able to pollute in other places to serve our own needs. He refers to "… the pollution produced by companies in less developed countries in ways they could never do at home in the countries in which they raise their capital." We may conclude therefore that much of Chinese air pollution is our air pollution, significantly caused by our own consumptive behavior.
4. Pope Francis suggests, with respect to foreign debt of poor countries, "The developed countries ought to help pay this debt by significantly limiting their consumption of non-renewable energy."

Weak Responses:

1. A legal framework insuring the protection of ecosystems is indispensable and needs to be created, for he finds the techno-economic paradigm to be a threat to freedom and justice, that our politics are subject to technology and finance—they rule.
2. Growing ecological sensitivity has not succeeded in changing the harmful habits of consumption, the latter growing more and more. (He gives the example of the growth of air conditioning.)
3. Francis rejects the priority that is given to speculation and pursuit of financial gain.
4. He observes that "(W)hatever is fragile, like the environment, is defenseless before the interests of a deified market which became the only rule." He faults the worship of the market as God, a violation of the First Commandment.
5. He raises an interesting question: "What would induce anyone, at this stage, to hold onto power only to be remembered for their inability to take action when it was urgent and necessary to do so?" In other words, current leadership will not emerge looking good.
6. He links a "false or superficial ecology which bolsters complacency and a cheerful recklessness" with "… the way human beings contrive to feed their self-destructive vices: trying not to see them, trying not to acknowledge them, delaying the important decisions and pretending that nothing will happen." We readily link ourselves to denial and escapism.

A Variety of Opinions:

We see signs that indicate we are not at a breaking point, a tipping point (when the opposite is true).

Chapter Two: The Gospel of Creation

Science and religion should enter into an intense dialogue.

The Light Offered by Faith:

Francis believes that faith convictions can offer Christians sufficient motivation to care for both nature and the most vulnerable among us.

The Wisdom of the Biblical Accounts:

1. Human life, he tells us, is grounded in three fundamental intertwined relationships: with God, with our neighbor, and with the earth itself. All three relationships have been broken, and this rupture is sin. This breaking of an ecology that is integral is the central idea of the encyclical.
2. We must "forcefully reject" the idea that our being given dominion over the earth justifies absolute domination over other creatures.
3. The Bible does not allow for a "tyrannical anthropocentrism" unconcerned for other creatures.
4. Being has priority over being useful. We must, therefore, respect the particular goodness of every creature to "avoid any disordered use of things."

The Mystery of the Universe:

1. Every creature has its own value and significance.
2. "We can finally leave behind the modern myth of unlimited material progress," Francis tells us, illustrating his belief that growth is not unlimited. He clearly believes in limits to growth.
3. The Church must protect mankind from self-destruction.
4. Nature as God's art: "Nature is nothing other than a certain kind of art, namely God's art, impressed upon things, whereby those things are moved to a determinate end," a reference to St. Thomas Aquinas. So when nature is viewed solely as a source of profit and gain, this has serious societal consequences.
5. He finds with Teilhard de Chardin that "(A)ll creatures are moving forward with us and through us towards a common point of arrival, which is God." Each creature has its own purpose and the Catechism of the Catholic Church teaches "God wills the interdependence of creatures. The sun and the moon, the cedar and the little flower, the eagle and the sparrow: the spectacle of their countless diversities and inequalities tells us that no creature is self-sufficient. Creatures exist only on dependence on each other, to complete each other, in the service of each other." What a pure ecological statement! Along this line, "(N)ature as a whole not only manifests God but is also a locus of his presence. The Spirit of life dwells in every living creature and calls us to enter into relationship with him. Discovering this presence leads us to cultivate the ecological virtues." And yet in practice we continue to tolerate that some consider themselves more human than others, as if they had been born with greater rights.

6. As we learn also from Wendell Berry and other great ecological minds, so also we learn from Pope Francis: "(O)ur indifference or cruelty towards fellow creatures of this world sooner or later affects the treatment we mete out to other human beings. We have only one heart, and the same wretchedness which leads us to mistreatment of an animal will not be long in showing itself in our relationship with other people."

7. Criticizing reductionism, Pope Francis notes "Peace, justice and the preservation of creation are three absolutely interconnected themes, which cannot be separated and treated individually without once again falling into reductionism."

The Common Destination of Goods:

1. The ecological and the social cannot be separated, as the fundamental rights of the poor and the underprivileged cannot be separated from the rights of nature.

2. Private property is to be subordinated to the universal destination of goods and the right of everyone to their use, which means that private property rights are limited. (Some might call this socialism.) He reinforces this position by noting "The Christian tradition has never recognized the right to private property as absolute or inviolable, and has stressed the social purpose of all forms of private property." Thus, there is always a "social mortgage" on all private property.

3. Francis suggests we are killing fellow humans by taking so much for ourselves.

The Gaze of Jesus:

Concluding this theological and spiritual chapter, Pope Francis remarks that the mystery of Christ is at work in a hidden manner in the natural world as a whole, without thereby impinging on its autonomy.

Chapter Three: The Human Roots of the Ecological Crisis

1. Francis reflects that understanding human life has gone awry, to the serious detriment of the world around us. One might say we knew before, we have today forgotten, and we must learn again.

2. We tend to believe that every increase in power over nature means an increase in "progress" itself and that reality, goodness, and truth automatically flow from technological and economic power as such. Francis exposed this as a myth because, he says, we have not been trained to use power well because our immense technological development has not been accompanied by an equal development in human responsibility, values, and conscience. Very few of us

realize, he says, that "Our freedom fades when it is handed over to the blind forces of the unconscious, of immediate needs, of self-interest, and of violence." Francis believes we cannot claim to have sound ethics, a culture and spirituality genuinely capable of setting limits and teaching clear-minded self-restraint.

The Globalization of the Technocratic Paradigm:

1. Francis portrays the scientific method as negative, a technique of possession, mastery, and transformation. "It is as if the subject were to find itself in the presence of something formless, completely open to manipulation." The relationship between human beings and material objects has become confrontational and this has made it easy to accept the idea of infinite or unlimited growth. "It is based on the lie that there is an infinite supply of the earth's goods and this leads to the planet being squeezed dry beyond every limit."

2. Both Francis and E.F. Schumacher ask, Should we serve science and technology, or should they serve us. And he reminds us that "(T)echnological products are not neutral." Power, he says, is the motive of technology: "Power is its motive—a lordship over all." Thus, "our capacity to make decisions, a more genuine freedom and the space for each one's alternative creativity, are diminished."

3. The Pope tells us that finance overwhelms the real economy—finance over all else.

4. Any science offering solutions to the great issues must take into account data generated by philosophy and social ethics. Yet how often do we do this? Rarely, if at all.

5. Technology conditions us so no one looks beyond it. So "Life gradually becomes a surrender to situation conditioned by technology, itself viewed as the principle key to the meaning of existence." As a remedy Francis tells us "There needs to be a distinctive way of looking at things, a way of thinking, policies, an educational program, a lifestyle and a spirituality which together generate resistance to the assault of the technocratic paradigm." To address this, he advocates cooperatives of small producers and for a non-consumerist model of life, recreation and community.

6. The Pope paints a promising picture: "An authentic humanity calling for a new synthesis seems to dwell in the midst of our technological culture, almost unnoticed, like a mist seeping gently beneath a closed door. Will the promise last, in spite of everything, with all that is authentic rising up in stubborn resistance?" He hints at change coming when he tells us there's a growing sense that "a way to a better future lies elsewhere."

7. Pope Francis criticizes our built environment in saying "If architecture reflects the spirit of an age, our megastructures and drab apartment blocks express the spirit of globalized technology, where a constant flood of new products coexists with a tedious monotony. Let us refuse to resign ourselves to this…"

The Crisis and Effects of Modern Anthropocentrism:

Francis remarks that the technological mind sees nature as an insensate order, as a cold body of facts, as an object of utility, and as raw material for use; and the cosmos is viewed similarly, thus compromising the intrinsic dignity of the world. He notes "Once the human being declares independence from reality and behaves with absolute dominion, the very foundations of our life begin to crumble," and we thus provoke a rebellion against us on the part of nature.

Practical Relativism:

Reaching the same conclusion as the distinguished American environmental leader Gus Speth, and as any American can divine, Francis writes that political efforts or the force of law will not be sufficient because the culture is corrupt and objective truth is no longer upheld.

The Need to Protect Employment:

1. Pope Francis sees, as I have expressed in my books, the value of what we can learn from the great tradition of monasticism in teaching us that manual labor is spiritually meaningful: "This way of experiencing work makes us more protective and respectful of the environment; it imbues our relationship to the world with a healthy sobriety." As E.F. Schumacher also tells us in *Good Work*, we were created with a vocation to work—work is a necessity, part of the meaning of life. And we must invest in people for, "To stop investing in people, in order to gain greater short-term financial gain, is bad business for society."
2. Francis endorses the value of small-scale local food production systems: "(I)t is imperative to promote an economy which favors productive diversity and business creativity… (T)here is a great variety of small-scale food production systems which feed the greater part of the world's peoples, using a modest amount of land and producing less waste, be it in small agricultural parcels, in orchards and gardens, hunting and wild harvesting, or local fishing."
3. Pope Francis promulgates sound science when he tells us (as have countless ecologists), "(W)e cannot interfere in one area of the ecosystem without paying due attention to the consequences of such interference in other areas."
4. Biological science research which is not influenced by economic interests can truly teach us. But Francis appears to be skeptical as to whether there is much such independent objective research around!
5. On genetic modification (GM), Francis finds that the risks involved are due to improper or excessive application. He likely agrees with the dominant European position on GM: It shouldn't be on the commercial market without much more knowledge based on independent research on its effects. This process is inherently slow.

6. He lists many known negative social effects of GM:

    – productive land is concentrated in the hands of a few owners;
    – the most vulnerable of these become temporary laborers;
    – many rural workers end up moving to poverty-stricken urban areas;
    – expansion of these crops has the effect of destroying the complex network of ecosystems, diminishing the diversity of production (i.e., monoculture instead of polyculture), and affecting regional economies; and
    – farmers are forced to purchase infertile seed.

He sees the need for greater efforts to finance various lines of independent interdisciplinary research capable of shedding new light on the problem. (But the businesses behind GMOs, Monsanto, Syngenta, Dupont, and others, will not share their information, claiming it is proprietary.)

Chapter Four: Integral Ecology

1. Francis again emphasizes at every opportunity that everything without is interconnected within and that a good part of our own genetic code is shared by many other living beings.
2. He reminds us we are not faced with separate crises, environmental and social—they are one and the same.
3. He also reminds us that nature has intrinsic value and that "(W)e live and act on the basis of a reality which has previously been given to us which precedes our existence and our abilities."
4. He believes we need an "economic ecology" which reflects a broader vision of reality.
5. He observes that the health of a society's institutions has consequences for the environment and for the quality of human life. He frets that lack of respect for the law (including government) is becoming more common.

Cultural Ecology:

1. Local culture must be given greater attention in decision making.
2. Consumerism is the enemy of cultures.
3. "A consumerist vision of human beings … has a leveling effect on cultures, diminishing the immense variety which is the heritage of all humanity."
4. The imposition of a dominant lifestyle linked to a single form of production can be just as harmful as the altering of ecosystems.
5. We must show special care for indigenous communities and their traditions.

Ecology of Daily Life:

1. Urban planning is not design alone! "Given the interrelationship between living space and human behavior, those who design buildings, neighborhoods, public spaces and cities ought to draw on the various disciplines which help us to understand peoples' thought processes, symbolic language, and ways of acting. It is not enough to seek the beauty of design." This is in synchrony with the new urbanist movement in planning, and it's important that urban planning always take into consideration the views of those who will live in these areas.
2. Echoing precisely the mantra of "new urbanism," he writes "It is important that the different parts of a city be well integrated and that those who live there have a sense of the whole, rather than being confined to one neighborhood and failing to see the larger city as space which they share with others."
3. He rejects the car as central and opts for public transit. He endorses a priority for public transit not just for environmental or energy reasons but for community values: Cars destroy the community.

The Principle of the Common Good:

1. He reviews the principle of subsidiarity, that all decisions affecting people should be made as close as possible to the people affected, both a Catholic principle and a new urbanist principle.
2. He reminds us there is in Christianity a "preferential option for the poor."

Justice Between the Generations:

1. Intergenerational solidarity is both ecological and "new urbanist," agrarian and Christian/Catholic—it is not optional for believers.
2. He writes "The pace of consumption, waste and environmental change has so stretched the planet's capacity that our contemporary lifestyle, unsustainable as it is, can only precipitate catastrophes." In fact, this is the inevitable end result of the contemporary lifestyle.

Chapter Five: Lines of Approach and Action

Dialogue on the Environment in the International Community:

1. He sees the necessity of sustainable agriculture (agroecology) over industrial agriculture.
2. He supports renewable and less polluting forms of energy, more efficient use of energy, promoting a better management of marine and forest resources, and universal access to drinking water. This mirrors any environmental conservation textbook.

3. He says we must reject fossil fuels without delay.
4. He reflects that the post-industrial period must be remembered as one of the most irresponsible in history.
5. The Pope is very aware of the whole string of international environmental summits and their success, and mostly failure, from Stockhom-1972 to the present.
6. He places a heavy onus on the U.S.A. and similar developed countries—we have greater responsibility than others, given all we've taken.
7. He calls carbon credits a "ploy": "The strategy of buying and selling carbon credits can lead to a new form of speculation which would not help reduce the emission of polluting gases world-wide. This system seems to provide a quick and easy solution under the guise of a certain commitment to the environment, but in no way does it allow for the radical change which present circumstances require. Rather, it may simply become a ploy which permits maintaining the excessive consumption of some countries and sectors."
8. We need a system of global governance for the oceans and other global commons—that system needs to be able to impose effective sanctions. The UN is the only such body that can do this today. The Pope shows clear expertise in nation-building.
9. We seem to be always concerned about protecting the (high) level of consumption and risks for foreign investment.
10. "(W)e are always more effective when we generate processes rather than holding on to positions of power. True statecraft is manifest when, in difficult times, we uphold high principles and think of the long-term common good. Political powers do not find it easy to assume this duty in the work of nation-building." This is strong insight for a Pope of limited experience in statecraft!
11. Pope Francis promotes cooperatives and local self-sufficiency in energy. He believes that local individuals and groups can make a real difference, for they're ready to instill a greater sense of responsibility, a strong sense of community, a readiness to protect others, a spirit of creativity, and a deep love for the land.
12. Citizens must control political power at all levels or it won't be possible to stop the damage.
13. He explicitly supports small producers and local farmers.
14. He explicitly supports crop rotation and other best management practices of sustainable agriculture.

Dialogue and Transparency in Decision Making:

1. The Pope finds that environmental impact assessment (EIA) has been corrupted into a ploy. He remarks that EIA should not come after the drawing of the business plan but before—it should be part of the process from the very beginning, and, as well, interdisciplinary, fully transparent, and free of all economic and political pressure. And the local population affected should have a place at the table. This is exactly like Wendell Berry's critique.

2. Honesty and truth count. Using the excuse "permitted by law" is insufficient.
3. "The culture of consumerism, which prioritizes short-term gain and private interest, can make it easy to rubber-stamp authorizations or to conceal information."—This is a problem of the culture of consumerism.
4. Water is special, and access to it is a fundamental human right.
5. Pope Francis endorses the precautionary principle which much of the world accepts, but the U.S.A. has rejected. He believes that indisputable proof of harm is not necessary to reject a product. And he wants to see honest and open debate on these matters.

Politics and Economy in Dialogue for Human Fulfillment:

1. The Pope rejects the rule of technocracy and economics.
2. Saving the banks, making only the public pay the price, reaffirms the absolute power of the financial system, which power he rejects.
3. He rejects profits as a primary goal: "Where profits alone count, there can be no thinking about the rhythms of nature, its phases of decay and regeneration, or the complexity of ecosystems which may be gravely upset by human intervention."
4. Decrease in the pace of production and consumption is a good thing, for it opens up other doors.
5. He wants to see decreased growth in some parts of the world (the North) so as to enable growth in other places. He advocates a more "sober" lifestyle for us.
6. He rejects the notion of sustainable growth: "Talk of sustainable growth usually becomes a way of distracting attention and offering excuses."
7. He is clearly opposed to profit maximization, for it misunderstands the very concept of economy. He says that "Businesses profit by calculating and paying only a fraction of the costs involved. Yet only when the economic and social costs of using up shared environmental resources are recognized with transparency and fully borne by those who incur them, not only by other peoples or future generations, can those actions be considered ethical."
8. He then returns to subsidiarity: Subsidiarity grants freedom to develop the capabilities present at every level of society, while also demanding a greater sense of responsibility for the common good from those who wield greater power.
9. He opposes deregulation.

Religions in Dialogue With Science:

1. Empirical science is limited and contains limits imposed by its own methodology.
2. There is a problem with overspecialization in science: "Dialogue among the various sciences is … needed, since each can tend to become enclosed in its own language, while specialization leads to a certain isolation and the absolutization of its own field of knowledge. This prevents us from confronting environmental

problems effectively. An open and respectful dialogue is also needed between the various ecological movements, among which ideological conflicts are not infrequently encountered." This is quite an important demonstration of scientific insight.

Chapter Six: Ecological Education and Spirituality

Toward a New Lifestyle:

1. Freedom to consume is a false freedom—the only people free are the minority who wield economic and financial power.
2. Self-centeredness tends to greed and the need to own and consume: "When people become self-centered and self-enclosed, their greed increases. The emptier a person's heart is, the more he or she needs things to buy, own and consume … Obsession with a consumerist lifestyle, above all when few people are capable of maintaining it, can only lead to violence and mutual destruction"—to social unrest.
3. "Purchasing is always a moral act," and not simply economic. This is right out of Aldo Leopold and his land ethic.
4. Francis cites the United Nations Earth Charter, a UN document written by Americans and, ironically, signed by all the nations of the world except the United States.
5. We need to set limits on ourselves.
6. Individualism is a problem: "If we can overcome individualism, we will truly be able to develop a different lifestyle and bring about significant changes in society."

Educating for the Covenant Between Humanity and the Environment:

1. Little daily actions are both important and noble: avoiding the use of plastics and paper, reducing water consumption, separating refuse, cooking only what can be consumed, showing care for other living beings, using public transport or carpooling, planting trees, turning off unnecessary lights, etc.
2. Reusing is a special goal (and much more important than recycling).
3. The Pope stresses the great importance of the family as a source of ecological and all other education.
4. All Christian communities, including seminaries and houses of formation, have an important role to play in ecological education.
5. "(W)e need institutions empowered to impose penalties for damage inflicted on the environment." Bad behavior must be made to pay.
6. We need a new way of thinking to combat consumerism. Otherwise, it will continue to advance with the help of media and the workings of the market.

Ecological Conversion:

1. Protecting God's handiwork is not optional for Christians.
2. Both individual conversion and community conversion are required.
3. "Each creature reflects something of God and has a message to convey to us." So we are not free to ignore creation care. Stern words, indeed.

Joy and Peace:

1. "Less is more"—an ancient message found in the Bible and in many religious traditions.
2. Being happy with little or less, a return to simplicity, liberates us: "Christian spirituality proposes a growth marked by moderation and the capacity to be happy with little. It is a return to that simplicity which allows us to stop and appreciate the small things, to be grateful for the opportunities which life affords us, to be spiritually detached from what we possess, and not to succumb to sadness for what we lack. This implies avoiding the dynamic of dominion and the mere accumulation of pleasures … Such sobriety, when lived freely and consciously, is liberating." Sobriety and humility need to be championed.
3. Inner peace = care for ecology. "An integral ecology includes taking time to recover a serene harmony with creation."

Civic and Political Love:

1. "… (B)eing good and decent are worth it. We have had enough of immorality and the mockery of ethics, goodness, faith and honesty. It is time to acknowledge that light-hearted superficiality has done us no good."
2. Integral ecology = simple daily gestures which break with the logic of violence, exploitation and selfishness. "In the end, a world of exacerbated consumption is, at the same time, a world which mistreats life in all its forms." Consumption thus equals mistreatment.
3. "Some show concern for a public place (a building, a fountain, an abandoned monument, a landscape, a square), and strive to protect, restore, improve or beautify it as something belonging to everyone." This is identical to "new urbanism," which both respects and treasures public places.
4. "(T)here is a mystical meaning to be found in a leaf, in a mountain trail, in a dewdrop, in a poor person's face."—The mysticism of nature, as also put forth by Thomas Berry.
5. "Rest opens our eyes to the larger picture and gives us renewed sensitivity to the rights of others."

The Trinity and the Relationship Between Creatures:

Web of relationship: "The world, according to the divine model, is a web of relationships." This is precisely what modern science tells us.

Queen of All Creation:

This is an ode to Mary, Mother of God, and to St. Joseph, commonly found in Catholic documents and teachings. Mary is said here to "care with maternal affection and pain for this wounded world."

Beyond the Sun:

This is a reference to eternal life, but makes it very clear that our obligation is here and now: "(W)e come together to take charge of this home which has been entrusted to us … Let us sing as we go. May our struggles and our concern for this planet never take away the joy of our hope."

In conclusion, Pope Francis offers two appropriate prayers, a "Prayer for Our Earth" and "A Christian Prayer in Union With Creation." Both reflect the sentiments of the very well known Prayer of St. Francis of Assisi, sentiments which imbue the entire encyclical.

Conclusion

So, we may conclude that this new papal encyclical is an extraordinary document by any measure because it is:

– Addressed to all of humanity and not just to the Catholic or Christian world;
– Exceptionally clear and enticing/inviting in its writing style;
– Very well grounded in Catholic theology, Catholic spirituality, in the history of Catholic social teaching, and in the work of predecessor popes and many bishops from all around the globe, as one would expect of an encyclical pronouncement, giving it high credence in the world from which it derives, the Catholic world;
– Strongly in synchrony with modern science at every turn, as one might expect of a pope who is trained as a chemist;
– Strongly critical of capitalism, somewhat in the tradition of an earlier encyclical, *Rerum Novarum* (meaning literally "of revolutionary change"), the encyclical of Pope Leo XIII on "Rights and Duties of Capital and Labor," issued in 1891;
– In accord with a Christian ideal that less is more;
– Strongly supportive of a complete and direct linkage between global poverty and the global environmental problem, particularly the challenge of climate change and its human causation, containing one of the most profound statements of "climate truth" ever made;
– Skeptical of our blind faith beliefs in both technology and the market;
– Especially supportive of the importance of understanding ecology (which Francis refers to as "integral ecology"), changing our modern value system from a mechanical–industrial model which is technology-driven, so characteristic of

the Industrial Revolution, to a biology/ecology-based value system which is characteristic of reality;
– Opposed to the practice of reductionism in Western science and economics;
– A challenge to both current ethics and economics;
– Indicative of the rise of South American, African, and Asian (i.e., non-Western) thought to a position at least equal to if not superior to previously dominant Western thought, both in the Church and in the world;
– A practice that is guided by ceaseless wonder at everything that is;
– A call to rediscover what it means to be human and, as a result, to reject the cult of economic growth and material accumulation;
– A critique of 21st century capitalism and, as a consequence, also of the philosophical underpinnings of the Industrial Revolution;
– A clear message from Pope Francis: STOP! CHANGE!

There is an extraordinary difference between this singular document, Pope Francis' encyclical, and all other documents issued by government at every level. It might be said that this encyclical recognizes, as none others do, the immediacy and magnitude of the challenge, and provides a path, a way, to meet that challenge. All others thus far fail in this goal: All others are unrealistic in the face of the challenge. They are not up to the challenge for they do not deal with these questions on moral terms, the heart and soul, the core of the question. For this reason alone, the encyclical deserves careful study, reflection, and debate.

Intergenerational Equity and Intergenerational Ethics

Before I was born it was promised to me. As to all of us. The chiefs promised it: We will keep this land for children, centuries hence, who deserve to dwell in the place we have known and loved. (Janisse Ray in Philip Juras: The Southern Frontier, 2011)

The earlier dwellers in the American land, our first peoples, knew about intergenerational equity and intergenerational ethics. We have forgotten such things, to our own peril. Pope Francis knows and is teaching us again.

Interactive Discussion Questions

1. What is the meaning and significance of the encyclical title, and where does it come from?
2. Who are some of the secular eco-philosophers who have laid a foundation for ecological ethics and values and eco-spirituality in the past?
3. Why might this encyclical be superior to, or perhaps more effective than, official UN and government goals documents on subjects like climate change, biodiversity, and other environmental issues?

4. What does our relationship to technology have to do with the way we respond to environmental challenges?
5. What does Pope Francis mean by "integral ecology"? And what are his "lines of approach and action," as presented in the encyclical?

References

Carroll, J. E. (2004). *Sustainability and spirituality.* State University of New York Press.

Carroll, J. E., Brockelman, P., & Westfall, M. (1997). *The greening of faith: God, the environment and the good life*. University Press of New England.

Carroll, J. E., & Warner, K. (1998). *Ecology and religion: Scientists speak*. Franciscan Press.

Francis, P. (2015). *Laudato Si (Praise Be): On care for our common home*. The Vatican.

LaChance, A., & Carroll, J. E. (1994). *Embracing Earth: Catholic approaches to ecology*. Orbis Books.

Leopold, A. (1948). The land ethic. In *A sand county almanac and sketches here and there*. Oxford University Press.

Ethics and Corporate Social Responsibility for Spirituality and Sustainability

5

Raghavan (Ram) Ramanan and Harold (Hal) Taback

Abstract

Sustainable development and ecosystem management commonly involve tough sociopolitical choices and often face a conflict between economic benefits and environmental degradation. This calls for stewardship from both corporate and public policy leaders to protect and preserve our only planet for future generations. People are inherently self-serving. Absent purpose as a moderator, one could easily skew the objective through the inherent bias of self or inner group interest. In the sustainability/environmental arena, unethical behavior often manifests itself in the form of—caring only for people who mimic us, protecting only parts of the eco-system that overtly serve us and of course generating profits only for a subsection of the stakeholders. In this chapter, the authors focus on environmental ethics within sustainability and expand the triple bottom-line context of people, planet, and profit with a fourth component—purpose—to emphasize the power of ethics as a balancing force to preempt the disastrous pitfalls of economics without ethics. 'Carbon-share' is introduced in the context of climate change and intergenerational equity, and a red flag raised that "Carbon-share could become the most contentious distributive justice issue globally." The chapter also highlights the crucial roles of corporate social responsibility and public policy stewardship, presents a framework for ethical decision making, and illustrates how an environmental ethics dilemma is resolved with a case study.

R. (Ram) Ramanan (✉)
Desert Research Institute, San Francisco, California, USA
e-mail: ram.ramanan@fulbrightmail.org

H. (Hal) Taback
Hal Taback Company, Highlands Ranch, Colorado, USA
e-mail: haltabackcompany@gmail.com

Introduction

"Earth provides enough to satisfy every man's needs, but not every man's greed."[1] Extreme greed, whether for money or nature's resources, has disastrous consequences. Today, given the unprecedented size and speed of global transactions, the world is poised for potential tsunamis in many areas because "the avenues to express greed have grown so enormously"[2] and "man has acquired significant power to alter the nature of his world."[3] This chapter focuses on the ethical dimension of sustainable development and ecosystem management. It expands the triple bottom-line context of people, planet, and profit with a fourth component— purpose and brings into focus the power of ethics as a balancing force to preempt the disastrous pitfalls of economics without ethics.

People are inherently self or inner group serving. Absent purpose as a moderator, one could easily skew the objective through the inherent bias of self or inner group interest. In the sustainability/environmental arena, unethical behavior often manifests itself in the form of—caring only for people who mimic us, protecting only parts of the eco-system that overtly serve us and of course generating profits only for a subsection of the stakeholders. Examples include organizations misleading investors through under-reporting material environmental risks from climate change, misleading consumers through "green-washing," or over-claiming the environmental friendliness of products and services.

The first section defines e*thics as the difference between what a person has the right to do and the right thing to do* and presents a persuasive case for it to be a mandatory dimension—the 4th bottom line to complement the triple bottom line of sustainability. The section also introduces the term 'Carbon-share'[4] in the context of climate change and intergenerational equity and raises a red flag that "Carbon-share could become the most contentious distributive justice issue globally."

The next section highlights the crucial roles of corporate social responsibility (CSR) and public policy stewardship in sustainability. Sustainable development and ecosystem management commonly involve tough sociopolitical choices. Corporations and leaders have to manage corporate social responsibility, and a public policy leader is often faced with balancing human needs and environmental considerations; the end goal in both cases is sustainability, to protect and preserve our only planet for future generations.

---

[1]Gandhi "Mahatma Gandhi—A Sustainable Development Pioneer," Govind Singh, Eco Localizer, last modified October 14, 2008 http://ecoworldly.com/2008/10/14/mahatma-gandhi-who-first-envisioned-the-concept-of-sustainable-development/ in http://www.mkgandhi.org/articles/environment1.htm.

[2]Alan Greenspan "Testimony of Chairman Alan Greenspan." said while presenting the Federal Reserve's Monetary Policy Report Federal Reserve Board. July 16, 2002. Archived from the original on June 7, 2011. Retrieved July 13, 2011. Accessed December 2012 available at http://en.wikipedia.org/wiki/Alan_Greenspan.

[3]Rachel Carson, Silent Spring (Boston: Mariner Books, 2002), accessed December 2012, http://www.goodreads.com/work/quotes/880193-silent-spring.

[4]Carbon-share is defined as the amount of carbon associated with meeting any human need for products or services.

A framework for ethical decision making and the foundations of building an ethics training program through participatory workshops in an organization in the context of corporate governance are presented in the third and final section illustrated with a case study on resolving a real-world ethical dilemma in the environmental arena.

Ethics—The 4th Bottom Line of Sustainability

Triple Bottom Line and Its Inadequacy

Sustainability strives to preserve the integrity of ecosystems. A widely quoted definition of sustainable development comes from the Brundtland Commission: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[5] Nobel laureate Robert Solow suggests that what we do now must ensure that the next generation lives as well as the current generation. However, he goes on to say that man-made capital (e.g., machines) is a substitute for natural capital.[6]

A frequently cited interpretation of what sustainability means is "… enlightened self-interest that achieves the triple bottom line of often competing, economic, environmental and social goals."[7] In their recent book, the authors[8] highlight ethics as the 4th bottom line of sustainability and present several anecdotal evidences to show the significance of ethical culture and governance in sustainable development and present a case study approach to offer practical insights on ethical decision making and on building an ethical culture in today's complex corporate ambiance.

Ethics is the difference between what a person has the right to do and the right thing to do! Person's right to do is often defined by law of the land. The right thing to do is the action taken in response to a situation that will result in the greatest benefit and the least harm to all the stakeholders. Paine presents the differences in the legal and ethical approaches to decision making elegantly.[9] While the legal tenet is to define a set of limits that must be met with a goal to prevent unlawful action, ethics provides a set of principles to guide choices to act responsibly. The first of two aspects of ethics involves the ability to distinguish right from wrong, good from bad, and propriety from impropriety. The second is a commitment to do what is

---

[5]Report of the World Commission on Environment and Development: Our Common Future, UN Brundtland Commission (United Nations, 1987).

[6]R.M Solow, "On the intergenerational allocation of natural resources," Scandinavian Journal of Economics 88 no, 1 (1986): 141–149.

[7]Ram Ramanan and W. Ashton "Green MBA and Integrating Sustainability in Business Education." Air and Waste Management Association's Environmental Manager, September 2012, page 13–15.

[8]Taback and Ramanan, Environmental Ethics and Sustainability (Florida, CRC Press, 2014).

[9]Lynn Sharp Paine, Venturing Beyond Compliance, The Evolving Role of Ethics in Business (New York: The Conference Board Inc., 1996), 13–16.

right and proper. Ethics is an action concept, not simply something to think and rationalize about. As US president Lyndon Johnson once said, "A president's hardest task is not to do what is right but to know what is right."[10] Understanding underlying ethical implications and commitment to the right action requires character and courage to meet the challenge when doing the right thing costs more than the stakeholder wants to pay. The following three examples cover a spectrum of colossal unethical behavior, from BP cutting corners on required maintenance expenses to achieve next quarter returns, to Enron executives creating complicated illusory and fraudulent accounting to mislead shareholders and lenders on to Madoff's downright predatory cheating of uninformed speculators in a Ponzi scheme of investments. In each case, to varying degrees, one or more of the three bottom lines—economic, environmental, and/or social—were overemphasized to the detriment of ethical culture that lead to devastating results.

'Carbon-Share'—The Most Contentious Distributive Justice Issue Globally

The central idea of both the Brundtland Commission[11] and Solow's[12] definition of sustainability is that of intergenerational equity. Climate change, "the two degree classic," is a case that tests this concept. A 2010 paper by the author on strategic framework for corporate carbon risk management introduces the term 'Carbon-share' and raises a red flag that "*Carbon-share could become the most contentious distributive justice issue globally.*"[13] Carbon-share is defined as the amount of carbon associated with meeting any human need for products or services. "Carbon-share, given its (negative) market externality, is a socio-political choice where science and society provide direction."[14] Carbon is a natural resource, but unlike other dwindling substances, in the case of carbon, we have to constrain its use to contain the generation of carbon dioxide. The potential catastrophic consequences of global warming, both physically and fiscally, compound its significance. Given the near omnipresence of carbon in our life today, restraining the allocation of carbon to competing processes is very complex and creates myriads of potential ethical dilemmas. In today's carbon-constrained world, this is a prime area for

---

[10]"President Lyndon B. Johnson's Annual Message to the Congress on the State of the Union January 4, 1965," University of Texas, last modified June 6, 2007, http://www.lbjlib.utexas.edu/johnson/archives.hom/speeches.hom/650104.asp.

[11]Report of the World Commission on Environment and Development: Our Common Future, UN Brundtland Commission, (United Nations, 1987).

[12]R.M Solow, "On the intergenerational allocation of natural resources," Scandinavian Journal of Economics 88 no, 1 (1986): 141–149.

[13]Ram Ramanan, "Corporate Carbon Risk Management—a Strategic Framework," EM October 2010 p. 20; Ram Ramanan, "Climate Hot Spots: Analyzing Emerging US GHG Programs," IHS Forum, San Francisco, CA, Sep. 2007; Ram Ramanan, "A response to the US climate change debates from a refinery perspective," Hydrocarbon Engineering, Nov., 2007.

[14]Ibid.

dilemmas in environmental ethics for academics and practitioners alike. "With different countries likely to undertake different levels of climate-change mitigation, the concern arises that carbon intensive goods or production processes could shift to countries that do not regulate greenhouse gas (GHG) emissions."[15] Issues start with what metrics to use: carbon in absolute value or per unit of product or per unit of GDP or per person basis. Additionally, complexity comes from who should bear the burden, reduce consumption, tolerate increase in cost of production, or pay more for the same exact functionality. Each one of these could grow into a treatise in ethics on its own.

In the era of marketing, in which perception was promoted as reality and reputation and brand were pushed as factors that mattered most, corporate social responsibility arrived as a gift from heaven to public relations. Green-washing, one form of which is lobbying against public interest, took on a life of its own. A classic case of ethical failure was the use of smoke and mirrors by the tobacco industry to hide the negative health impacts of smoking by showing macho athletes smoking. A recent example is the campaign by contrarian scientists and industry-sponsored think tanks to sow doubt about climate change.

Corporate Social Responsibility (CSR) and Public Policy Development

Ecosystem Management—a Sociopolitical Choice

Sustainable development and ecosystem management commonly involve tough sociopolitical choices. As a society progresses, it often faces a conflict between economic benefits and environmental degradation. How much environmental protection is appropriate? What is the right balance between environmental protection and exploitation of natural resources?

When the seller and the buyer market exchange process impacts an external entity that has no say in setting the exchange price, a market externality is created. Externality often challenges the traditional market efficiency principles and makes ecosystem development issues tough sociopolitical choices, one that economists continue to battle. Regulatory intervention becomes inevitable and leads to highly charged debates of public opinion. In the context of pollution, one could think of these as stakeholder demand for "right to no pollution" or the "right to compensation." Stakeholder engagement in cost–benefit analysis and choice of relevant regulatory mechanisms are the key drivers in resolving this sociopolitical conflict.

---

[15]Jeffrey Frankel, "Global Environmental Policy and Global Trade Policy—Harvard Project on International Climate Agreements," accessed December 2012, available http://belfercenter.ksg.harvard.edu/publication/18647.

Stakeholder preferences for cost–benefit analysis of ecosystem development alternatives can be biocentric, anthropocentric, or centered on sustainability. Biocentrism has the biologic world as the center, focused on the intrinsic value of life, and does not consider usefulness to human beings to be one of its instrumental values. Anthropocentrism assumes that the environment is there to provide material gratification to humans. Sustainability strives to preserve the integrity of ecosystems.

Sustainable development and ecosystem management alternatives are commonly evaluated and compared using cost–benefit analysis. Stakeholders are engaged and their inputs considered. Also, core assumptions regarding the social discount rate and the value of reducing risks of premature death and of health improvements are required in the cost–benefit analysis of most environmental policy decisions. The benefits and costs should be quantified where possible but presented with a description of uncertainties. However, decision makers should not be bound by strict cost–benefit tests. In particular, because equity is a non-economic factor, it is crucial to identify important distributional consequences to ensure that ethical choices are made. This is especially true in such areas as climate change (discussed earlier) and environmental justice—not unduly impacting people of lower socioeconomic strata because they tend to live closer to emissions and discharges from manufacturing facilities that pollute the environment.

Regulatory intervention mechanisms that the governments commonly deploy to manage ecosystem development are command and control, liability through law suits (also known commonly as toxic torts), emissions fees or tax incentives, and emissions credit trading. Command and control is the most dominant form of regulation, in which specific pollution control equipment, technology, or emission limit for type of plant or specific pollutant(s) are prescribed by regulation. These regulations carry significant financial and personal criminal liability/penalties for non-compliance. They are enforced through the legal framework and courts. The "liability" approach, where polluters are responsible for the consequences and pay for all damages, creates incentives for the polluter to take precaution, as this approach can lead to toxic torts. Some jury awards may be very significant.

The other two regulatory mechanisms offer more direct economic incentives. "Emissions fees" calls for a charge per unit of pollution—it is in the polluter's interest to reduce pollution to lower the fees they must pay. "Tax incentives" encourage investment in low-emission technologies. These approaches could achieve predefined environmental standards at the lowest possible cost. But the control authorities often do not know the correct fee to charge or incentive to provide in order to reach the optimum pollution for market efficiency. "Marketable permits/emissions credits trading," on the other hand, allows polluters and speculators to buy and sell rights to pollute. It separates who pays and who installs controls.[16] A polluter may install excess controls that yield emission reduction credits (ERC) and use the revenue from the sale of ERCs to pay for the controls.

---

[16]P.R. Koutstaal, "Tradeable CO_2 emission permits in Europe: a study on the design and consequences of a system of tradeable permits for reducing CO_2 emissions in the European Union" (PhD Diss., University of Groningen, 1996), p. 17. http://www.unicreditanduniversities.eu/uploads/assets/CEE_BTA/Dora_Fazekas.pdf.

Efficiency is achieved through the use of purchased or internally generated ERCs to avoid controls for operating facilities and equipment units that are more expensive to control. This preserves society's resources to achieve highest *bang for the buck*.

Evolution of CSR—A Clarion Call for Ethical Leadership in the New Economy

Capitalism in general and the American dream in particular interpret greed to be a healthy trait. This mantra, along with an obsession with the primacy of shareholder interests, has driven most early entrepreneurial efforts to privatize gains and socialize costs. Greed has become pervasive in business from executives, corporations, banks, and financial markets.

The role of the public corporation and the nature of the "social contract" have been changing over the past two centuries, but have changed at a faster pace in the recent decades. The role of business is transforming from one merely fulfilling a social contract to taking on social responsibility with the growing recognition that shareholders are only one of many stakeholders. A principal driver of this societal transformation is the recognition that business is no longer the sole property or interest of a very few. Notably, synchronous interactive connectivity among stakeholders has had a significant role in this change.

"The corporate (and corruption) scandals and implosions of the past decade, climaxing in the recent global financial crisis and environmental disasters have highlighted how critical ethically, environmentally, and socially responsible decision making and leadership are to the long-term survival and success of both individual businesses and society."[17] It is no longer feasible to ignore the changing business ambiance and social contract under which corporations and public service organizations have to operate. In today's global environment, societal needs are defining markets, and business (and public policy) leaders have to address a range of issues from poverty and hunger to sustainability and ethics. Ethical issues include bribery, fraud, green-washing, inequity, and a culture of corruption. Corporations and leaders have to manage corporate social responsibility and integrate it into their global strategy, and a public policy leader is often faced with balancing human needs and environmental considerations; the end goal in both cases is sustainability—to protect and preserve our planet for future generations.

---

[17]Ram Ramanan and W. Ashton "Green MBA and Integrating Sustainability in Business Education." Air and Waste Management Association's Environmental Manager, September, 2012, Page 13–15; also accessed December 2012 available at http://stuart.iit.edu/about/faculty/pdf/green_mba.pdf.

"With increasing focus on sustainability factors from the marketplace (regulators, investors, financiers and consumers), corporate sustainability reporting is shifting from voluntary to vital; and more recently becoming an integral part of annual financial reporting. Many stock exchanges are requiring corporations to provide citizenship or social responsibility reports prior to listing them. Advances in enterprise systems are making it feasible for corporations to track and transform sustainability performance. The materiality of these seemingly non-economic impacts is the critical link between sustainability and business strategy. Leaders need insight into how to determine which sustainability metrics are material to them and relevant to their business."[18] Long overdue, only now are ethics metrics being incorporated within sustainability reporting.[19]

Ethical Dimension in Decision Making

Formation of Human Value System

Most humans are not naturally (information asymmetry apart) data centric, evidence driven, cold calculative, consciously thoroughly evaluating and choosing rational robots (individuals). Nature and nurture are not orthogonal components of a person's development; the intertwining impacts are inseparable in any meaningful way. They are rather emotional spontaneous beings with sociocultural upbringing bias who decide and then rationalize their choices. Learned behavior, especially in the formative years, goes a long way in defining character and its consequent impact on ethical or unethical behavior. Character, which is formed at an early age, defines the extent to which people will go to achieve an objective. Gandhi always held that a prerequisite to making ethical choices is to build a strong character and that requires one to always be cognizant that the means is as important as the end goal.

Rational Charioteer or Centaur?

Aristotle is often cited to describe unethical behavior as when man's rationality is overcome by his desire. Most humans naturally draw their sense of values from multiple sources—reason (philosophical or secular), realization (spiritual), or religion (faith)—and often these have synergistic effect. Plato's rational charioteer could reign in the irrational passionate horses using the head (philosophical or

---

[18]Ram Ramanan and W. Ashton "Green MBA and Integrating Sustainability in Business Education." Air and Waste Management Association's Environmental Manager, September, 2012, Page 13–15.

[19]G-4 56–58 Ethics and Integrity within Governance metrics of Global Reporting Initiative, https://g4.globalreporting.org/general-standard-disclosures/governance-and-ethics/ethics-and-integrity/Pages/default.aspx.

secular), the heart (spiritual), or the heavenly (faith). These diverse inputs cement convictions about identifying the right thing and a commitment to doing the right thing. This inspires one to act more like a Centaur, where the horse and the rider are one—which, if steered correctly could effectively detoxify rampant materialism and preserve our only planet.

Ethical Decision Making—Characteristics

Ethical decision making is affected by three qualities: competence in identifying issues and evaluating consequences, self-confidence in seeking different opinions and deciding what is right, and willingness to make decisions when the issue has no clear solution. The development of these qualities in individuals depends on their intrinsic personality and their stage of moral development at the point of decision.

Other factors that contribute to individuals' ethical decision-making process in the workplace are the moral intensity of the consequence of the action; the individual's empathy, knowledge, and intellectual and emotional ability enabling one to recognize the potential impacts on stakeholders; and the influence of the business and job environment. For instance, sending a personal email from an office computer may not be seen as unethical at all.

Some individuals are more capable of understanding the broader impacts of an issue than others. For example, the natural attenuation remediation of a contaminated site may be better understood by someone with expertise in the area. They may also realize that the natural attenuation remediation is a good use of the community's resources and that by not moving contaminated materials it reduces health risks. However, this does not imply that such an individual is more ethical and will make more ethical decisions. For instance, one could be an environmental activist with a set agenda to make the company responsible for soil contamination pay more for the remediation, or one may be an environmental consultant who offers remediation contract work, and choosing this natural attenuation option may eliminate contract work. Hence, this action may lead the consultant to choose the less ethical option of dig, move, and treat the dirt that provides him additional contract work and compensation.

Ethics Training for Leaders and Professionals

Building a culture of ethics is critical; effective ethics training is crucial to overcome our inherent selfishness. When faced with a real-world ethical dilemma, a person cannot formulate an appropriate response from the hypothetical two-on-a-raft situation. Ethics training is valuable for everyone. It sensitizes us to ethical issues and prepares us to respond appropriately to ethically questionable situations, which are usually unexpected. Frequent in-house ethics training and organizational ethical

culture building supplemented with appropriate incentive/deterrent system will help develop ethical values and minimize the temptations to cheat.

Training is not a one-time activity but an ongoing process. The ethics training model we suggest for leaders and professionals is a planned series of participatory workshops that discuss real-world relevant dilemmas and help people learn how to do the right thing rather than leave it to their instinct. There should be a significant number of participants to debate opposing opinions, thereby promoting deeper understanding.

Workshops that include top management participation are especially effective because executives can share their values and employees can feel comfortable about their probable reactions before dubious situations occur. Imagine a CEO who stands up in the workshop and says, "I have always respected the truth. You will never have trouble with me if you tell the client the truth and come directly to me with any conflicts." The employees in that workshop would have enhanced confidence in their employer's support for doing the right thing. In addition to reducing the risk of employees doing the wrong thing at the spur of the moment, these ethics workshops build confidence between management and employees that strengthens the relationship on all fronts.

Ethical Values Checklist for Leaders and Professionals

Following Josephson's[20] approach to ethical decision making and principled reasoning, we identify six major ethical values which he contends form the core consensus on ethical values which transcend cultural, ethics, and socioeconomic differences. These core values, the "six pillars of character," are trustworthiness, respect, responsibility, justice and fairness, caring and civic virtue, and citizenship. Taback[21] provides a practical values checklist that gives environmental leaders and professionals an opportunity to examine a situation from all sides. The format could be used whenever a professional is faced with an environmental dilemma. It suggests that decision makers create a table that lists the various subelements of the six pillars of character as values on one side and evaluates the issues and related actions on the other side. After completing such a table, the professional should take the contemplations to colleagues, peers, and supervisors for validation and select the right action.

---

[20]Michael Josephson, "Making Ethical Decisions," accessed December 2012, available at http://www.sfjohnson.com/acad/ethics/Making_Ethical_Decisions.pdf.

[21]Hal Taback, "Ethics Training: An American Solution for Doing the right Thing" in Engineering and Environmental Ethics Edited by John Wilcox and Louis Theodore (New York: John Wiley Price: 1998), pages 267–280.

Environmental Ethics Dilemma—Example Case Study

Example Case Description[22]

It often takes training to even recognize an ethical dilemma. For example: You are a successful young project manager in a consulting firm that has national accounts with several major manufacturing firms. Because of your previous excellent performance, you are assigned to manage environmental assessments at several plants of one of these large companies. The contract is being conducted under legal counsel, and the results will be handled to maintain privilege under the law. You find a toxic chemical release that you know will dearly threaten public health. You contact the attorney who ordered the study and report your findings. The attorney directs you to stop work at that site, move on to another plant, and not to submit your findings in writing. You point out the need to report this to the responsible agency. The attorney reminds you of the contract that provides for the confidentiality of the findings and tells you that if there is to be any reporting, the attorneys will handle it. You are warned that this information and this conversation are to be held confidential and "will remain between the two of us. Do not discuss it with anyone!" Your attempts to learn how the attorney will proceed on this information are met with the comment, "It is not your concern. You do your job (i.e., to investigate) and I will do mine. If I need any additional information, I will ask for it."

You do not know when or if the release will be reported. From the conversation with the attorney, you know that any attempt you make to learn further details on the disposition of your information will be met with hostility. Should you follow orders and go to the next plant? Should you document the findings in a formal report? The client might not pay for this action, since you were ordered not to prepare the report. Whether or not the law in this state requires you to report the release, if some adverse health affect occurs, the injured parties could sue the manufacturing firm. Eventually, it will be discovered that you and your consulting firm had knowledge of the release. What if your client decides not to report it?

This is truly an ethical dilemma and requires some difficult decision making. If you have never contemplated such a dilemma, you might decide to follow the attorney's dictates. After all, attorneys are supposed to tell you what to do under the law. Besides, your firm signed a contract that says the data are confidential. You might think, "OK, I will go to the next site and not make any waves."

But, if the consulting firm had held ethics training on a regular basis using a case study approach, the management's position on situations like these would be known and could be implemented with confidence and diplomacy. Your management would want to ensure that some corrective action is taken to protect public

---

[22]Taback, "Ethics Training," 267–274.

health. Your firm would advise that you elevate this situation to your supervisor, or further if necessary. Also, as an environmental professional, your first obligation is to protect public health. You would know that to drop the issue and go on to the next plant is not the right thing to do. You would be prepared to do the right thing. The specifics of how this issue would be resolved in any consulting firm depend on the relationship of those involved. Some considerations will be discussed in the following paragraphs.

Case Study Questions

1. Is this an ethical dilemma?
2. Should you follow orders and go to the next plant?
3. Should you document the findings in a formal report?

Example Case Study Discussion[23]

Having established the responsibility of the environmental consultant to protect public health, we can explore how this responsibility applies in specific cases. Consider the case already described. The young project manager has just ended the initial phone conversation with the client contact, the attorney. If the consultant auditor has had ethics training, he or she would follow the values checklist, presented in the next section, before elevating the situation to management. It is most important to be sure of the facts. Could there be any error in the data? Have verification tests been run? Should an uninvolved colleague be consulted to review the findings before anyone goes to management? Clearly, the confidentiality of the data must be maintained. However, the consultant cannot afford to be wrong when so much is at stake.

After all these issues have been checked and the necessary analyses conducted to indicate the certainty of risk to public health, before the call to the client, it is time to consult management. If this checking is still underway and will take some time, then management must be advised and informed of the verification plans. It is unacceptable for management to learn of the situation for the first time in a phone call from the client.

Ideally, a management team meeting will be held at which the project manager can lay out the facts. The communication link between the consulting firm and the client will be decided, usually at the highest level in each firm that has an established relationship. Necessary action should be taken to report the toxic pollutant release. The project manager should participate to the extent the client wishes but should keep aware of the proceedings at all times. At times like these, it is important to maintain respect and mutual concern. The client's attorney may seem dictatorial initially, and the project manager may feel some hostility. However, after the two company

---

[23] *Ibid. 267–274*

managements have made a plan of action, the project manager and attorney will probably need to work together. Therefore, it is important that the project manager maintain a respectful demeanor and an attitude of competence in dealing with the attorney from the outset.

Human nature can cause some of us to react spontaneously to difficult situations, thereby upsetting a business relationship. The situation described in the case study could cause a spontaneous reaction. However, the project manager's exposure to a hypothetical situation such as this one in an ethics workshop would be a reminder of the need to practice restraint and maintain dignity. In most situations, a result satisfactory to all parties can be achieved. However, in the event that your management does not respond appropriately, you are not relieved of your responsibility to do the right thing.

You must pursue the proper action in a dignified manner, keeping in mind the values of justice and fairness. Try to understand the position of those with whom you disagree; try to convince them with facts and reason. Protecting the public from exposure to toxic pollutants is primary, but only if doing so does not create a more adverse impact. A more adverse impact could involve immediate physical and emotional stress caused by the loss of jobs when a plant is closed after severe penalties are imposed as a result of an inadvertent release by a confused employee. Compassion for families that might suffer due to plant closure is not inconsistent with doing the right thing. Each individual must establish his or her own values, which in some cases will mean leaving a firm because of a disagreement in values. Before one makes a decision of this magnitude, it is important to use a checklist such as the one shown below to evaluate the issues involved.

Values Checklist for Example Case Study[24]

This values checklist requires some serious contemplation and reflects the thoughts of the authors. It is neither complete nor inherently correct. We suggest the reader use it as a starting point to examine all sides of an issue, and this format be used whenever a professional is faced with an ethical dilemma. After consulting or completing the table, take your contemplations to a colleague, supervisor, or, better yet, a group of confidants for a thorough discussion.

---

[24]*Ibid. 274–279.*

Values Checklist for the Example Case Study—Table

Value	Issue	Action
Trustworthiness		
Honesty	Accurate and thorough reporting and interpretation of analytical data and answering all questions. Giving appropriate credit to participants in the report	Disclose the findings, do not conceal questionable details, and hold accurate but unrestrained dialogue. Involve your staff
Integrity	The courage to report adverse findings, realizing the possible consequences, and to advise clients in advance of this intent	Report promptly to the client and to your supervisor. (The case study does not indicate that the firm notified client of their intent to report.)
Sincerity	Showing concern and appreciation for the seriousness of a situation and possible consequences	Maintain a serious and concerned attitude in all dealings with the client
Loyalty	Looking out for your firm's interest in a delicate position	Inform your supervisors and accept this participation in the disposition
Promise-keeping	Meeting the explicit and implicit contractual requirements	Maintain the confidentiality of the assessment data
Respect		
Courteousness	Politeness and respect in all interactions with clients, supervisors, colleagues, and subordinates	Say please and thank you and acknowledge clients' assistance
Punctuality	Being on time for meetings, meeting program due dates	On occasions when you may miss a due date, notify client as soon as possible
Right of self-determination	Respect for each individual's right to decide for oneself, even if wrong	Provide clear direction initially and do not criticize others in public
Responsibility		
Pursuit of excellence	Maintaining knowledge of the latest in technology and proficiency in the tools of your profession	Ensure that the release detection reflects best measurement techniques
Competence	Maintaining control of the situation from technical, safety, and management standpoints	Demonstrate competence
Integrity	The courage to do the right thing when the consequences may be adverse	Ensure that the client (or responsible party) will execute cleanup as appropriate
Self-restraint	Considering facts and circumstances. Consulting supervisors and colleagues before acting with care	Elevate the situation to management and facilitate a plan of action

(continued)

(continued)

Value	Issue	Action
Justice and Fairness		
Open-mindedness	Recognizing that there are various solutions to every dilemma, willingly considering them, and offering to cooperate with independent assessments when the seriousness of the matter warrants them	Try to learn and understand any workable plans of the attorney. Suggest client get a second opinion to verify findings
Ability to admit errors	Recognizing when you are wrong and openly admitting it. Releasing work product to be checked in an independent evaluation	If there are any anomalies in the data, reveal them immediately. Get uninvolved colleagues to check work
Caring		
Kindness	Helping others achieve their legitimate goals	Offer to help the attorney deal with the situation. Explain risks and benefits
Generosity	Offering money and free help and advice to a colleague for problem solving, etc.	Offer to meet with the client on an off-the-record basis to discuss issues
Compassion	Recognizing the downsides of various actions for employees' families and other stakeholders and attempting to mitigate hardship	Keep in mind the impact on stakeholders as you seek to resolve this dilemma
Avoiding harm to others	Protecting public health and being concerned for public welfare	Continue to seek prompt resolution to mitigate health and welfare impacts

Chapter Summary

- Sustainable development and ecosystem management commonly involve tough sociopolitical choices and often face a conflict between economic benefits and environmental degradation. People are inherently self-serving. Absent purpose as a moderator, the objective could be skewed through the inherent bias of self or inner group interest.
- Triple bottom-line context of people, planet, and profit of sustainability must be expanded with a fourth component—purpose—to emphasize the power of ethics as a balancing force to preempt the disastrous pitfalls of economics without ethics.
- Both corporate social responsibility and public policy stewardship play crucial roles in sustainable development. A framework for ethical decision making and its application to resolve an ethical dilemma is illustrated with a case study.

- "Carbon-share" is introduced in the context of climate change and intergenerational equity and defined as the amount of carbon associated with meeting any human need for products or services.

Interactive (discussion) questions

1. How would you establish "Carbon-share"—a very contentious distributive justice issue equitably on a global scale?
2. Development of leaders with a conscience has the power to greatly scale doing good while doing well. Discuss this in the context of "a leader's hardest task is not to do what is right but to know what is right" and private public partnership.
3. Given that ethics predates religion, is it innate, invented, or transcendental? Discuss this in the context of nature and nurture being orthogonal components of a person's development.
4. A major city police chief once said, we cannot legislate out the problem of gangs and drugs. It needs a radical change in society starting with building family ethical values in early childhood. Please discuss in the context of "Ethics is the difference between what a person has the right to do and the right thing to do."

Spiritual Capabilities: Keys to Successful Sustainable Strategic Management

6

Jean Garner Stead and W. Edward Stead

Abstract

Today's business organizations face significant environmental pressures to operate as sustainable enterprises that earn their economic returns in socially and ecologically responsible ways. These sustainable enterprises are built on effective, efficient sustainable strategic management (SSM) processes. These SSM processes are established on intangible, causally ambiguous, spiritual capabilities. These capabilities support the development of spiritually based core competencies that provide sustainable enterprises with sustained economic, social, and ecological competitive advantages.

Sustainability: The Twenty-First Century Business Context

Sustainability, typically defined as providing a high quality of life for current and future generations, is a global vision that involves all people and all business organizations. Sustainability is usually portrayed as having three interdependent dimensions: the economy, the society, and the natural environment. The interactions among these dimensions are complex and in many cases lie outside traditional business models.

Sustainability has grown from a fringe issue in the 1970s to a central issue in the global consciousness today. Hawken says, "Social and cultural forces are currently converging into a worldwide movement that expresses the needs of the majority of

J.G. Stead (✉) · W.E. Stead
East Tennessee State University, Johnson City, TN, USA
e-mail: steadj@mail.etsu.edu

W.E. Stead
e-mail: steade@mail.etsu.edu

people on Earth to sustain the environment, wage peace…and improve their lives".[1]

Of course when an issue becomes central in society, it becomes an important part of the business strategy landscape. Senge says that the rising sustainability consciousness is a "profound shift in the strategic context"[2] of business, and a survey of global business executives bears him out.[3] Ninety percent of the 2874 responding executives said that implementing sustainability strategies is or will be a competitive necessity for their organizations, and 70 % said they have put sustainability on their strategic agendas in the last six years. The researchers concluded, "The sustainability movement [is nearing] a tipping point".[4]

Eastman Chemical Company's former CEO, Jim Rogers, agrees with the above survey results. He said, "Sustainability is an area where we can show our hearts but use our brains. We show our hearts by doing things that protect the next generation of the world that we live in—things like reducing greenhouse gases, volatile organic compounds, and energy use. Sure, this saves us money, but we know it is the right thing to do. However, the fun part is when we get to use our brains, which involves looking for ways to drive growth with sustainability. Doing this means giving our customers what they want so that they can ride the sustainability wave with us. We want to be right there alongside our customers helping them drive sustainability as a competitive advantage. Sustainability is a mega trend sweeping over our industry and many others. It makes sense for our business, it makes sense for our world, and it is very consistent with Eastman's culture of continuous improvement, innovation, and responsibility".[5]

Coevolution theory[6] teaches that organizations wishing to survive this new sustainability-infused environment will need to create transformational change processes that allow them to ingrain sustainability-centered values and ways of thinking deep in their organizational cultures. This means a complete shift in the organization's consciousness. This involves developing new values, new beliefs,

---

[1]Hawken, Paul. 2007. *Blessed Unrest*. New York: Viking.Senge, Peter M., Bryan Smith, Nina Kruschwitz, Joe Laur, and Sara Schley. 2008. *The Necessary Revolution*. New York: Doubleday. Speth, James Gustave. 2008. *The Bridge at the Edge of the World*. New Haven, CT: Yale University Press.

[2]Senge, Peter M. 2011, June 17. Educating Leaders for a Sustainable Future. AACSB Sustainability Conference, Charlotte, N.C.

[3]Kiron, David, Nina Kruschwitz, Knut Haanaes, Ingrid Von Streng Velken. 2012. "Sustainability Nears a Tipping Point." *MIT Sloan Management Review*, 53, no. 2, 69–74.

[4]Kiron, David, Nina Kruschwitz, Knut Haanaes, Ingrid Von Streng Velken. 2012. "Sustainability Nears a Tipping Point." *MIT Sloan Management Review*, 53, no. 2, 69–74.

[5]Stead, J.G. and W.E. Stead. 2014b. *Sustainable Strategic Management*. Armonk, NY: M.E. Sharpe and Sheffield, UK: Greenleaf.

[6]Porter, Michael E. 1995. "The Competitive Advantage of the Inner City." *Harvard Business Review*, 73, no. 3, 55–71

new ways of thinking, and new ways of doing things.[7] This means redefining an organization's core values, the nature of its work, and its relationships with its stakeholders at all three levels—economic, social, and environmental.[8]

Sustainable Strategic Management (SSM)

Thus, implementing SSM requires transformational change based on a core value of sustainability. Whereas traditional strategic management is based on neoclassical economic assumptions of a closed economy not subject to nonmarket factors, SSM is based on the assumption of the economy as a coevolving subsystem of the greater society and ecosystem. Traditional strategic management focuses on increasing market share within well-defined industry borders with a focus on continuously adapting to "what is." SSM requires that strategic managers not only engage in adaptive learning within well-defined industry borders, but also they must also employ generative learning[9] by questioning long held assumptions about their organization's industry, customers, mission, capabilities, and strategies. SSM requires the development of a new way of looking at the world based on an understanding of the coevolutionary social, ecological, and economic systems that link issues and events in the organization's environment. This forces strategic managers to focus on interrelationships and dynamic processes of change rather than linear cause and effect, enabling them to look beyond traditional industry borders and strategy models and ask, "what can be?"

SSM has emerged from a spiraling coevolutionary dance between business organizations and their sustainability-rich environments. SSM involves a set of processes and strategies that include strategic analysis, strategy formulation, and

---

[7]Beckhard, Richard and Walter Pritchard. 1992. *Changing the Essence*.
San Francisco: Jossey-Bass.Senge, Peter M. 1990. *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Doubleday/Currency.

[8]Dunphy, Dexter, Andrew Griffiths, and Suzanne Benn. 2007. *Organizational Change for Corporate Sustainability,* 2nd ed. London: Routledge.
Freeman, R. Edward, Jessica Pierce, and Richard H. Dodd. 2000. *Environmentalism and the New Logic of Business*. Oxford, UK: Oxford University Press.
Gladwin, Tom, James Kennelly, and T. Krause. 1995. "Shifting Paradigms for Sustainable Development: Implications for Management Theory and Research." *Academy of Management Review*, 20, no. 4. 874–907.
Post, James E. and Barbara Altman. 1992. "Models for Corporate Greening: How Corporate Social Policy and Organizational Learning Inform Leading-Edge Environmental Management." In *Research in Corporate Social Policy and Performance*, ed. James Post, 3–29. Greenwich, CT: JAI Press.
Post, James E. and Barbara Altman. 1994. "Managing the Environmental Change Process: Barriers and Opportunities," *Journal of Organizational Change Management*, 7, no. 4, 64–81.
Stead, W.E. and J.G. Stead. 1994. "Can Humankind Change the Economic Myth? Paradigm Shifts Necessary for Ecologically Sustainable Business." *Journal of Organizational Change Management*, 7, no. 4, 15–31.

[9]Senge, Peter M. 1990. *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Doubleday/Currency.

strategy implementation that are economically competitive, socially responsible, and in balance with the cycles of nature. These three stages represent the reciprocal nature of the SSM process.

SSM begins with a strategic vision based on sustainability. A strategic vision is a shared image painted in words that portrays the ideal future of the firm. It is meant to stretch a firm by articulating an ambitious, positive future state that will help to motivate employees and drive strategies. A vision of sustainability, by definition, includes a value of caring for future generations. Given that contributing to the greater good is a common characteristic of spirituality, achieving a sustainability-based strategic vision will require developing spiritually based capabilities in order to effectively achieve it. Nonetheless, an inspiring vision based on a core value of sustainability helps employees find meaning in their work because they see their personal aspirations captured within the firm's strategic vision.[10]

> In 1994, Ray Anderson, the late founder and CEO of Interface Global, the world's leading producer of soft-surfaced modular floor coverings, challenged his employees with a bold vision: "To be the first company that, by its deeds, shows the entire industrial world what sustainability is in all its dimensions—people, process, product, place and profits—by 2020…".[11] Two decades later, this passionate vision still leads the firm. Ray Anderson's commitment to and passion for sustainability continues to inspire and motivate Interface's employees because it provides them with a sense of being a part of something larger. This is big picture thinking with passion. It empowers all of Interface's organizational members to think that together they can change the business world through their collective actions.

Organizational Resources

A key element in building effective SSM strategies is the deployment of resources to build core competencies that will afford the firm sustainability-based competitive advantages. According to the resource-based view (RBV) of the firm,[12] organizational competitive advantages are achieved through the effective management of internal resources, where profit differentials result from the heterogeneity of the firms. Firm performance is a function of the types of resources developed and exploited by managers through functional and competitive level strategies that build

---

[10]Collins, Jim. 2001. *Good to Great*. New York: HarperBusiness.Collins, Jim and Jerry Porras. 1994. *Built to Last: Successful Habits of Visionary Companies*. New York: HarperBusiness.

[11]Interface Global. 2008. http://www.interfaceglobal.com/Company/Mission-Vision.aspx (accessed July 16, 2012).

[12]Barney, Jay. 1986. "Strategic Factor Markets: Expectations, Luck, and Business Strategy." *Management Science*, 32, 1231–1241.
Barney, Jay. 1991. "Firm Resources and Sustained Competitive Advantage." *Journal of Management* 17: 99–120.
Barney, Jay and William Hesterly. 2010. *Strategic Management and Competitive Advantage*. 3rd ed. Upper Saddle River, NJ: Prentice Hall.
Wernerfelt, B. 1984. "A Resource-Based View of the Firm," *Strategic Management Journal,* 5, 171–180.

competitive advantages. Resources are factors that allow a company to create more value for its customers than its competitors create. Thus, value creation lies at the heart of effective resource deployment.

Resources are defined as "the tangible and intangible assets that a firm controls that it can use to conceive and implement its strategies".[13] Tangible resources include the firm's physical assets such as factories and inventories, and intangible resources include nonphysical entities such as the firm's brand and reputation. Organizational capabilities are a subset of organizational resources that enable the firm to take advantage of other resources and provide it with the ability to conceive and implement strategies.

Intangible Resources

Intangible resources, such as brand loyalty, reputation, organizational culture, and spiritual capital, add significant value to firms but generally remain invisible on their financial statements.[14] Also, intangible human capital such as employee commitment, skills, expertise, effort, and trust has value for the firm that is not fully evident in the firm's financial statements. Even so, it can afford the firm major competitive advantages. Knowledge capital, a subset of human capital, is an intangible resource that comprises the information, skills, experience, group work, and on-the-job learning. Knowledge capital is based on organizational learning where employees share skills and information with each other in order to improve efficiencies. Thus, the process of increasing knowledge capital within organizations involves investing in developing human potential in the workplace. Human capital investment can also be socially responsible, economically profitable,[15] and it can enhance firm competitiveness.

Research indicates that human capital will be the most important corporate resource over the next 20 years. The battle for talented employees is dramatically intensifying, and attracting and retaining talent is imperative for economic survival. Research reveals that in the U.S. 75 % of workforce entrants consider environmental and social criteria important when selecting employers. Firms with progressive human resource policies and strategies based on an inspiring vision like sustainability have been shown to have a competitive edge in attracting and retaining

---

[13]Barney, Jay and William Hesterly. 2010. *Strategic Management and Competitive Advantage*. 3rd ed. Upper Saddle River, NJ: Prentice Hall.

[14]Grant, Robert. 2008. *Contemporary Strategy Analysis, 6th Edition*. Oxford, U.K.: Blackwell Publishing.

[15]Benn, Suzanne and E. J. Probert. 2006. "Incremental Change Towards Sustainability: Integrating Human and Ecological Factors for Efficiency." In *Managing the Business Case for Sustainability*, eds. Stefan Schaltegger and Marcus Wagner, 542–552. Sheffield, UK: Greenleaf Publishing Limited.
Spirig, K. 2006. "Social Performance and Competitiveness: A Socio-Competitive Framework." In *Managing the Business Case for Sustainability*, eds. Stefan Schaltegger and Marcus Wagner, 82–106. Sheffield, UK: Greenleaf Publishing Limited.

high-quality employees.[16] As discussed above, a vision of sustainability may engage employees' desires to feel like they are part of a larger purpose, so managers may find that their investments in human capital lead to greater productivity and profitability as well as a means of fulfilling their social responsibilities.

Reputational capital is another intangible resource that can be enhanced by investing in sustainability. General Electric, Starbucks, and Unilever have all established world-class brand recognition by investing in sustainability. However, the sustainability reputation of a brand can be easily damaged if organizations do not practice what they preach. According to Stuart Hart, "It's becoming increasingly clear that companies that fail to live by a set of principles that optimize results for all stakeholders might get away with it for awhile. But in the end, the negative feedback loops get you and it's going to bring you down".[17] Volkswagen's recent scandal and resultant loss of 14 billion euros demonstrates this point.

Building strategies on intangible resources like these has been consistently shown to provide added value for firms. Resource-based view pioneer Jay Barney[18] concludes that firms that build strategies on both tangible and intangible resources tend to outperform firms that rely solely on tangible resources. Roberts and Dowling[19] found that a positive corporate reputation is directly related to a firm's sustained superior financial performance. In research more directly related to sustainability, Surroca, Tribó, and Waddock[20] found that unless intangible resources like reputation and knowledge capital are developed, positive financial performance from social strategies is difficult to achieve, and Hart and Milstein[21] found that sustainability creates financial value by improving the firm's legitimacy and reputation.

Organizational Capabilities

Strategic capabilities are "tangible and intangible assets that enable a firm to take full advantage of the other resources it controls".[22] They are specific skill sets that can be creatively composed in various and sundry ways from various and sundry

---

[16]Nidumolu, R., C. Prahalad, and M. Rangaswami 2009. "Why Sustainability is Now the Key Driver of Innovation." *Harvard Business Review*, September, 57–64.

[17]*MIT Sloan Management Review* and The Boston Consulting Group. 2011. "Sustainability: The "Embracers" Seize Advantage." *MIT Sloan Management Review*, Winter, 4–27.

[18]Barney, Jay. 2001. "Is the Resource-Based 'View' a Useful Perspective for Strategic Management Research? Yes." *Academy of Management Review* 27, no. 4: 339–358.

[19]Roberts, P.W. and Dowling, G.R. 2002. Corporate Reputation and Sustained Superior Financial Performance. *Strategic Management Journal,* 23(12), 1077–1093.

[20]Surroca, J. Tribó J.A. and Waddock, S. 2010. Corporate Responsibility and Financial Performance: the Role of Intangible Resources. *Strategic Management Journal,* 31(5), 463–490.

[21]Hart, S.L. and Milstein, M. 2003. Creating Sustainable Value. *Academy of Management Executive*, 17(2), 56–67.

[22]Barney, Jay. 1991. "Firm Resources and Sustained Competitive Advantage." *Journal of Management* 17: 99–120.

resources to build unique core competencies that provide the firm with sustainable competitive advantages.[23] Organizations need numerous capabilities that can be arranged in creative ways to build a few core competencies that provide the firm with sustained competitive advantages. Examples of organizational capabilities include outstanding customer service, exceptional innovation processes, and superb product development processes which for the most part are embedded in the human capital of the firm. The more complex the integration of capabilities, the harder it is to imitate the firm's core competencies, and the longer the competitive advantage can be sustained.[24] Thus, capabilities are process-focused.

Dynamic capabilities are critical success factors in today's turbulent environment where strategic managers must continuously scan the external environment and strategically fit the firm's internal resources to the dynamic external environment.[25] Specifically, strategic managers must have the ability to change the firm's resource base and activity system as the external environment changes. Thus, dynamic capabilities are essential in order to gain and sustain competitive advantages. Not only do dynamic capabilities allow firms to adapt to changing market conditions, they enable firms to create market changes and explore new market space.

Core Competencies and Competitive Advantages

Resource assessment is a process of gathering internal data about the firm's resources, comparing the data to competitors, and evaluating the potential for the resources and capabilities to be developed into core competencies. Core competencies are unique strengths that are valuable, rare, difficult to imitate, and organized to capture value.[26] Core competencies provide the basis for competitive advantage. These unique strengths allow the firm to more effectively differentiate its products and/or achieve substantially lower costs than competitors. Core competencies must be strategically combined and deployed by functional level strategies so as to build sustained competitive advantages through the exploitation of the core competencies in the market via the firm's competitive strategies.[27] If numerous competitors possess a valuable resource, it becomes a basic business requirement, which is a resource or capability that the firm is required to possess to compete in the industry.

---

[23]Prahalad C.K., and Gary Hamel.1990. "The Core Competence of the Organization." *Harvard Business Review*, May/June, 79–91.

[24]Prahalad C.K., and Gary Hamel.1990. "The Core Competence of the Organization." *Harvard Business Review*, May/June, 79–91.

[25]Eisenhardt, K.M. and M. Martin. 2000. "Dynamic Capabilities: What are They?" *Strategic Management Journal,* no. 21, 1105–1121.

[26]Barney, Jay. 1991. "Firm Resources and Sustained Competitive Advantage." *Journal of Management* 17: 99–120.

[27]Barney, Jay and William Hesterly. 2010. *Strategic Management and Competitive Advantage*. 3rd ed. Upper Saddle River, NJ: Prentice Hall.

A basic business requirement provides a firm with competitive parity but no unique competitive advantages.

In order for a resource to be a core competence, it must be valuable, rare, and costly to imitate. These are the characteristics that distinguish core competencies from other resources. A resource is considered valuable if it can be utilized to exploit an external opportunity or neutralize a potential threat. A resource is considered rare when there are few competitors in the industry that possess it.[28] Thus, a resource that is valuable and rare has the potential to be a competitive advantage. However, environmental turbulence may make a competitive advantage transitory as competitors respond.

A resource must also be costly to imitate by competitors to be considered a core competence. A resource is costly to imitate when firms who do not possess the resource or capability face a cost disadvantage in obtaining or developing it compared to firms who already possess it.[29] Thus, the inimitability of a resource is a key factor in determining the value of core competencies. Further, by examining resources through the lens of complexity theory, resources can be examined in terms of complex systems, such as business ecosystems, that allow for a more holistic, less reductive evaluation of resources. This includes evaluating the resource's inimitability in terms of causal ambiguity, social complexity, and system level resources.[30]

Causal ambiguity occurs when competitors do not fully understand how the firm is using its capabilities as foundations to build a competitive advantage. Causal ambiguity has its base in bounded rationality, the idea that the ability to make rational decisions is limited because of imperfect information. As the term causal ambiguity suggests, the cause–effect nature of situations is obfuscated, making them hard to understand and evaluate rationally. Causal ambiguity exists because problems, ideas, processes, and so forth are ill defined and complicated. According to Reed and DeFillippi,[31] causal ambiguity is a legitimate barrier to imitating sustainable core competencies.

Social complexity relates to complex social phenomena such as interpersonal relationships, trust, friendships among managers, and a firm's reputation with suppliers and customers. Social complexity generally refers to the fact that human relationships are highly complex phenomena that are difficult to understand and systematically manage with any real certainty. Barney and Hesterly[32] give

---

[28]Barney, Jay. 1991. "Firm Resources and Sustained Competitive Advantage." *Journal of Management* 17: 99–120.

[29]Barney, Jay. 1986. "Strategic Factor Markets: Expectations, Luck, and Business Strategy." *Management Science*, 32, 1231–1241.Barney, Jay. 1991. "Firm Resources and Sustained Competitive Advantage." *Journal of Management* 17: 99–120.

[30]Colbert, B. 2004, "The Complex Resource-Based View: Implications for Theory and Practice in Strategic Human Resource Management." *Academy of Management Review,* 29 no. 3, 341–358.

[31]Reed, R. and R. DeFillippi. 1990. "Causal Ambiguity, Barriers to Imitation, and Sustainable Competitive Advantage." *Academy of Management Review,* 15, 88–102.

[32]Barney, Jay and William Hesterly. 2010. *Strategic Management and Competitive Advantage*. 3rd ed. Upper Saddle River, NJ: Prentice Hall.

interpersonal relationships among managers, the dynamics of an organization's culture, and the reputation of a firm with its customers as examples of socially complex factors in business organizations.

System level resources are holistic in nature and are difficult to imitate. Social capital is not only socially complex, but also holistic in nature. The relationships within the firm and with the communities where the firm operates are causally ambiguous, socially complex, and holistic in nature. Thus, from a complex adaptive systems perspective, the more causally ambiguous, socially complex, and holistic the resources are, the more difficult it is for competitors to imitate them, thus offering a potential sustained competitive advantage to the firm.[33]

Firms generally have numerous resources (tangible and intangible) and capabilities that can be strategically deployed and combined via functional level strategies into a system of a few core competencies that are valuable, rare, and costly to imitate. If the firm is organized to capture value, these core competencies provide the building blocks for competitive strategies that will create competitive advantages for the firm. Thus, once a core competence is exploited in the marketplace via the firm's competitive strategy, it becomes a competitive advantage for the firm. Google's organizational culture is a competitive advantage since it generates its revenue streams with innovative product and services due to the investment Google makes in the human capital of the firm.

Spiritual Capabilities: A Source of Competitive Advantage

The development of spiritual capabilities involves the coevolution of spiritual intelligence and spiritual capital. Thus, it can be characterized as both process and product. Gardner[34] said that human intelligence is multifaceted, with each person having different intelligences that coexist and develop relatively independent of one another. Most common among these human intelligences is rational intelligence, generally referred to as IQ (intelligence quotient). Theoretically, a high IQ reflects a high ability to solve logical problems. Goleman[35] demonstrated that emotional intelligence (EQ) is as important as IQ. EQ is a measure of people's awareness of

[33]Barney, Jay. 1986. "Strategic Factor Markets: Expectations, Luck, and Business Strategy." *Management Science*, 32, 1231–1241.

Barney, Jay. 1991. "Firm Resources and Sustained Competitive Advantage." *Journal of Management* 17: 99–120.

Colbert, B. 2004, "The Complex Resource-Based View: Implications for Theory and Practice in Strategic Human Resource Management." *Academy of Management Review,* 29 no. 3, 341–358.

Grant, Robert. 1991. "The Resource-Based Theory of Competitive Advantage." *California Management Review*, 33, no. 3, 114–135.

Schoemaker, P. J. H. 1990. "Strategy, Complexity and Economic Rent." *Management Science,* 36, 1178–1192.

[34]Gardner, Howard. 1993. *Frames of Mind: The Theory of Multiple Intelligences.* London: Fontana.

[35]Goleman, Daniel. 1996. *Emotional Intelligence*. New York: Bantam Books.

other people's feelings as well as their own. As such, it is the source of human compassion, empathy, and motivation. EQ has been shown to be especially important within the business context. For example, Walter, Cole, and Humphrey[36] reported that a strong research link has been established between EQ and effective leadership attitudes and behaviors.

In the past decade or so, spiritual intelligence (SQ)[37] has gained attention. This is the intelligence that humans use to solve problems of value and meaning. It is a means of integrating internal and external experiences, which facilitates this problem solving,[38] and it enables humans to adapt to coevolving life conditions.[39] SQ helps put human behaviors and lives within a larger context of meaning; thus, it transcends and integrates IQ and EQ.

Unlike other species, human beings search for meaning and value in what they do because they are driven by questions regarding why they exist and what their lives mean. Humans have a longing to feel a part of a larger purpose, something toward which they can aspire. SQ allows them to be creative, to use their imaginations, and to change their rules. It allows them to think out of the box and to play with the boundaries of their existence. It is this transformative characteristic that distinguishes SQ from IQ and EQ. Whereas both IQ and EQ work within the boundaries of human existence, SQ allows individuals to question whether or not they want to be in the situation in the first place. SQ facilitates the dialogue between reason and emotion, between mind and body, and between personal experience and spiritual tradition and culture. It provides the ability to integrate all the intelligences. Thus, it is a transcendent intelligence[40] that enables the paradigm shift to higher level values.[41]

As managers within the organization increase their levels of SQ, this can become transformative for the organization. The result of the transformation is the creation

---

[36]Walter, F, M. Cole, and R. H. Humphrey. 2011. "Emotional Intelligence: Sine Qua Non of Leadership or Folderol?" *Academy of Management Perspectives,* 25, no. 1, 45–59.

[37]Zohar, D. and I. Marshall. 2000. *Spiritual Intelligence: The Ultimate Intelligence*. New York: Bloomsbury Publishing.Zohar, D. and I. Marshall. 2004. *Spiritual Capital: Wealth We Can Live By.* San Francisco: Berrett-Koehler.

[38]Hyde, B. 2004. "The Plausibility of Spiritual Intelligence: Spiritual Experience, Problem Solving and Neurial Sites." *International Journal of Children's Spirituality,* 9, no. 1, 14–18.Vaughan, F. 2002. "What is Spiritual Intelligence?" *Journal of Humanistic Psychology,* 42, no. 2, 16–18.

[39]Beck, Don E. and Kenneth Wilber. 2008, 'Explanation of Spiral Dynamics Integral, Courtesy of Clare Graves' http://video.google.com/videoplay?docid=3637777359401476371 (accessed August 18, 2012).

[40]Sisk, D. and Torrance, E. 2001. *Spiritual Intelligence: Developing Higher Consciousness.* Buffalo, NY: Creative Foundation Education Press.

[41]Graves, C. 1974. Human Nature Prepares for a Momentous Leap. *The Futurist*, April, 72–85. Graves, C. 1970. Levels of Existence: An Open System Theory of Values. *The Journal of Humanistic Psychology*, 10(2), 131–154.

Beck, Don E. and Christopher C. Cowan. 1996. *Spiral Dynamics: Mastering Values, Leadership and Change*. Oxford, UK: Blackwell.

Wilber, K. 2000. *Integral Psychology: Consciousness, Spirit, Psychology, Therapy*. Boston, MA: Shambhala Publications, Inc.

of spiritual capital in the organization, a kind of wealth earned by acting not out of short-term gain, but by serving fundamental human needs. This facilitates the creation of values that serve both organizational and societal needs.[42] According to Beard,[43] "spiritual capital refers to the positive benefits of spiritual, psychological, and moral development to individuals, organizations and communities/societies."

Human capital serves as the foundation for spiritual capital within the firm. Spiritual capital is a kind of intangible wealth earned by acting out of the human need to serve a higher purpose like sustainability. This type of wealth helps to create a culture that is nourishing and sustaining for the human spirit. High levels of spiritual capital allow for disruptive change and generative (creative) learning within organizational cultures without causing them to fracture. It enhances the organization's ability to meet the real needs of society rather than just meeting material needs. In essence, it exists in the soul of a firm and it defines its fundamental core values and larger purpose.[44] Spiritual capital, embodied within human capital, provides the foundation for the spirit of sustainability. Thus, spiritual capabilities are both process and product. Process in that spiritual intelligence is embodied within the human capital of the firm, influencing strategic decision making and product in that the spiritual capital within the firm results from this spiritually infused decision-making process.

Spiritual capabilities can provide a source of competitive advantage to the firm since they are very difficult to imitate by competitors due to their causal ambiguity, social complexity, and their holistic nature. In fact, research indicates that intangible resources such as spiritual capabilities are more valuable than tangible resources in building sustainability-based competitive advantages. A survey of 3000 global business executives representing every major industry revealed that sustainability performance has become a source of sustained competitive advantage where the evaluation and measurement of intangible resources is emphasized. Leading firms such as Johnson and Johnson, Proctor and Gamble, and New Belgium Brewing all place a very high value on sustainability-based intangibles.[45]

Companies that have developed spiritual capabilities and embraced sustainability as a core value spend more time and effort quantifying the impact that their businesses have on brand, reputation, employee productivity, and the ability to attract top talent than those firms who see sustainability as merely an add-on to their strategies. Firms with sustainability as a core value tend to have deep values for the conservation of natural resources, and they strongly believe that valuing such intangibles improves their long-run effectiveness. Firms have developed ways to

---

[42]Porter, M. and Kramer, M.R. 2011. Creating Shared Value. *Harvard Business Review,* Jan–Feb, 63–77.

[43]Beard, S. 2012. Examining, Evaluating, and Exploring Spiritual Capital. http://www.ekklesia.co.uk/research/spiritual_capital (accessed February 6, 2013).

[44]Zohar, D. and I. Marshall. 2004. *Spiritual Capital: Wealth We Can Live By.* San Francisco: Berrett-Koehler.

[45]*MIT Sloan Management Review* and The Boston Consulting Group. 2011. "Sustainability: The "Embracers" Seize Advantage." *MIT Sloan Management Review*, Winter, 4–27.

measure these intangibles even though such measurements are generally fraught with problems that render their accuracy suspect. Despite their scalar inaccuracies, the measures allow firms to show that they place a high value on important intangibles.[46]

Howard Schultz: The Transformative Power of Spiritual Intelligence

Howard Schultz, founder and CEO of Starbucks, exemplifies the transformative power of spiritual intelligence. His leadership has resulted in high levels of spiritual capital that have transformed his organization. In 2007 when Schultz was serving as chairman but not CEO, he said Starbucks had lost its way and that the pursuit of profit had become its only reason for being. He declared that profit was not the reason Starbucks was in existence. With sales and stock prices rapidly declining, Schultz returned as CEO.

In an interview with Oprah Winfrey, Shultz said he had the passion to serve, but that it's hard to create passion solely around the pursuit of profit. He said that coffee is what Starbucks sells, but it is not the business Starbucks is in. they are in the business of exceeding customers' expectations by building a company that treats people with dignity and respect. Do this well, and the profits will come.

His passion and desire to serve is rooted in his childhood experience. He watched his father work a series of blue-collar jobs that were totally unfulfilling. The family's breaking point came when his father was injured on the job with no health insurance or workman's compensation.[47] This childhood experience was the foundation for Shultz's guiding principles and values that are now the "spirit" of his organization. It's an organization where his father would have wanted to work.

How does a transformative leader like Howard Schultz begin to restore the passion in his organization in hopes of turning around declining sales, declining profits, and declining stock prices? He knew it all began with his employees, the firm's human capital where its spirit is embedded. It was his job to communicate the passion and the guiding principles on which he founded his firm. So he held a four-day conference in New Orleans, in which he called together 10,000 Starbucks managers with the goal to inspire and to challenge them to be personally accountable for everything at their stores. Schultz felt that he had created a tidal wave of energy in his 10,000 managers when they all left New Orleans.[48]

---

[46]*MIT Sloan Management Review* and The Boston Consulting Group. 2011. "Sustainability: The "Embracers" Seize Advantage." *MIT Sloan Management Review*, Winter, 4–27.

[47]Gallo, Carmine. *Forbes,* Dec 19, 2013. http://www.forbes.com/sites/carminegallo/2013/12/19/what-starbucks-ceo-howard-schultz-taught-me-about-communication-and-success/ (accessed Sept. 18, 2015).

[48]Gallo, Carmine. *Forbes,* Dec 19, 2013. http://www.forbes.com/sites/carminegallo/2013/12/19/what-starbucks-ceo-howard-schultz-taught-me-about-communication-and-success/ (accessed Sept. 18, 2015).

As the turnaround by Schultz demonstrates, building spiritually based capabilities results in competitive advantages that are hard to imitate by competitors. However, building these capabilities required much more than a four-day conference, and Shultz fully understood that he had to back up his talk with corporate actions that reinforced his values and guiding principles. Starbucks was the first company in America to offer comprehensive health insurance and firm ownership in the form of stock options to all of its employees, including part-time workers. Starbucks also now offers to all of its employees a free college education at Arizona State University, no strings attached. Investment in human capital, where the spirit of the firm is embedded, has created the spiritual capital that gives Starbucks a competitive advantage in the global coffee market, with record revenues, profits and stock prices. In fact, financial analysts call Starbucks a recession proof stock.

Questions for reflection

1. *Describe how Howard Schultz built competitive advantages through building spiritually based capabilities in his turnaround strategy.*
2. *Reflect on the relationship between Howard Schultz's childhood experiences and the guiding principles and values of Starbucks.*
3. *Explain how investments in human capital create reputational capital that affords competitive advantages to the firm.*

Spiritual Capabilities and the Vision of Sustainability

According to Peter Senge,[49] creating a shared vision is the key to transforming the personal SQ of strategic managers into spiritual capital that can permeate an organization's strategic management process. Senge refers to shared vision as the "spiritual foundation" of the organization. He describes how directly tying the personal visions of employees to the strategic vision of the organization leads to virtuous coevolutionary cycles that can guide the organization toward a sustainable future.

The spiritual capabilities organizations experience from processes like the one described by Senge become the glue that binds people together. They provide organizational members with a moral and a motivational framework, an ethos, a *spirit*. This spirit transcends, sustains, and enriches both material capital and social capital. In other words, it embeds the organizational culture with *spirit*.[50] Further,

---

[49]Senge, Peter M. 1990. *The Fifth Discipline: The Art and Practice of the Learning Organization.* New York: Doubleday/Currency.

[50]Zohar, D. and I. Marshall. 2004. *Spiritual Capital: Wealth We Can Live By.* San Francisco: Berrett-Koehler.

this spirit can enhance managers' understanding and commitment to a core value of sustainability. The transformative powers of spiritual capabilities can give managers deeper insights into why contributing to humanity's sustainability efforts is critical for their organizations' survival.[51]

As the external environment becomes more saturated with demands for sustainable solutions from multiple stakeholder groups, developing tangible and intangible sustainability capabilities becomes a competitive necessity. Such capabilities may be scientific, technological, organizational, and/or spiritual.[52] Whereas developing tangible sustainability capabilities can provide firms with cost-saving and revenue-generating benefits, developing intangible sustainability capabilities is necessary for the development of such things as "disruptive innovations" required for long-term survival during the sustainability revolution. Some examples of intangible, spiritually based capabilities include the ability to build an organizational culture based on the shared vision of sustainability, the ability to create spiritual and social capital resulting in positive economic, social, and ecological business relationships, and the ability to build an ethical system grounded in sustainability. Developing such intangible capabilities will lead to the transformational changes required for a shared vision of sustainability creating long-term competitive advantages for the firm.

Chapter Summary

The purpose of this chapter is to educate the student about the development of spiritually based capabilities that are the foundation of the firm's SSM strategic management process. Because they are costly to imitate by competitors, they provide the firm sustainability-based competitive advantages in today's sustainability-infused business environment. Specifically, the chapter covers:

- The sustainability revolution as the new business context
- An overview of sustainable strategic management (SSM), the next coevolutionary stage of the strategic management process
- The resource assessment process and the definitions of tangible resources, intangible resources, and capabilities
- A discussion of core competencies and competitive advantages
- A discussion of the role of spiritual intelligence and spiritual capital in building spiritual capabilities
- Spiritual capabilities as a source of competitive advantage
- Spiritual capabilities in crafting a vision based on sustainability

---

[51]Stead, J.G. and W.E. Stead. 2014a. "Building Spiritual Capabilities to Sustain Sustainability-Based Competitive Advantages," *Journal of Management, Spirituality, and Religion*, 11(2), 143–158.

[52]Laszlo, C. and Zhexembayeva, N. 2011. *Embedded Sustainability: The Next Big Competitive Advantage*. Sheffield, UK: Greenleaf.

Chapter Questions

- Discuss, using examples from the chapter, the business context in which organizations now operate and the coevolution of sustainable strategic management (SSM) as the strategic response to the new business environment.
- Discuss the resource assessment process and the role and the relationships between resources, core competencies, and competitive advantages in this process.
- Using examples from the chapter, discuss spiritual capabilities and the role of spiritual intelligence and spiritual capital in their formation. How could spiritual capabilities afford a competitive advantage to the firm?

The Spiritual Roots of Economic Sustainability

John Ikerd

Abstract

All economic value is derived from nature by way of society. However, all economic value is rooted in human values and ultimately in the spiritual values that give purpose and meaning to human life. In the absence of purpose, there is no logical motivation for sustaining human life or sustaining human economies. Thus, economic sustainability is rooted in spirituality. Contemporary social critics fail to understand that the fundamental challenges of sustainability are ethical, moral, and ultimately spiritual rather than technological or economic. They fail to understand the fundamental differences among economic value, social value, and ethical or cultural values. They fail to see that sustainability ultimately depends on creating a moral and ethical culture that gives economic sustainability priority over economic expediency. "Deep sustainability" goes beyond shallow or instrumental strategies which focus on resource efficiency and substitution, motivated by economic incentives. Deep sustainability explores the philosophical, ethical, and spiritual roots of ecological, social, and economic integrity. In so doing, it calls for a spiritual-rooted, cultural revolution. This revolution must be motivated by an understanding that the pursuit of economic sustainability is synonymous with the pursuit of authentic happiness—which is inherently social and spiritual as well as material. A sustainable economy would simply provide the material requisites or means for a pursuit of happiness motivated by a spiritual sense of purpose. This chapter explores the means of creating a new sustainable economy that is firmly rooted in spirituality.

J. Ikerd (✉)
University of Missouri, Columbia, USA
e-mail: jeikerd@gmail.com

Economic Sustainability: Rooted in Purpose

Contrary to appearances, the economy is not rooted in global financial markets where money is created out thin air and fortunes are made and lost through meaningless manipulation and speculation. The economy is not even rooted in the natural and human resources from which all economic value is derived, as might appear quite logical. It is the true that everything that is of use to us, including everything of economic value, ultimately must come from the earth or nature—minerals, soil, air, water, and energy. There is no other possible source. And beyond self-sufficiency, we must rely on relationships with other people, meaning society, to derive value from nature. Furthermore, to meet needs that cannot be met through *personal* relationships, we must rely on *impersonal* markets. Obviously, economic value is derived from nature by the way of society. However, the value of the economy is rooted in human values and ultimately in the spiritual values that give purpose and meaning to human life.

There is no way to prove that life has purpose because the purpose of anything is always derived from some higher level (Ikerd 2007, pp 5–7). For example, the purpose of the heart and lungs cannot be derived from their relationships with each other but only from their essential functions in maintaining the health and life of the body—the higher level of organization. Likewise, the purpose of individual persons must be derived from the "communities" of which they are members, the purpose of communities and societies from the whole of humanity, and the purpose of humanity from some higher level beyond human observation, quantification, or sensory experience. Our ultimate sense of purpose and meaning in life is ultimately rooted in a higher, *spiritual* level of reality. Plato referred to this higher level of reality as the ultimate, eternal, "forms," or substance of things. Others refer to it as consciousness, the higher order, or simply as God. Regardless, the existence of purpose ultimately depends on the existence of a supernatural or spiritual realm of reality.

The fundamental question of sustainability is: How can we meet the needs of all in the present without diminishing opportunities for those of the future? If there is no meaningful purpose for human life on earth, there is no logical reason to be concerned about the sustainability of human life on earth. It simply would not matter one way or another. In the words of noted ecological economist, Herman Daly, "if we think that our world, our lives, and our conscious, self-reflective thinking are just a random happenstance of matter in motion… then it is hard to see why we should make any sacrifice to maintain the capacity of the earth to support life, or from where we would get the inspiration to do so (Daly 1999, p 694)." Current threats to global sustainability indicate that many people have not felt a need to make any sacrifice to sustain human life on earth. Perhaps, they have been not been *spiritually* inspired to do so.

Contemporary economics makes no judgement about the purpose or motivation for economic decisions—other than to serve individual, instrumental, and impersonal self-interests. In failing to recognize the higher purpose for the economy, we have allowed the motivation for the ecological and social integrity essential for

economic sustainability to degenerate to the lowest common denominator: *money*, and money is the basic measure of economic value. We see the ecological consequences in the relentless extraction and depletion of the earth's natural resources and the wanton pollution of nature. We see the societal consequence in the growing disparity of income and economic opportunity both within and among nation of the world. Obvious signs and indicators of unsustainability, such as global climate change and species extinction, cultural wars, and persistent poverty, have not significantly distracted public attention from the relentless quest for economic growth and ever-greater financial wealth.

Indicators of Unsustainability

Biodiversity is perhaps the clearest indicator of ecological sustainability because diverse natural ecosystems are the only means of sequestering the biological/solar energy that sustains human life on earth. Elizabeth Kolbert, investigative writer for *The New Yorker*, in her book, *The Sixth Extinction*, cites compelling evidence of the consequences in terms of a massive die-off of non-human species, similar in rate and magnitude to five great species extinction events of the past. She points out that global climate change and other *non-human* causes obviously were responsible for the five previous major extinctions. She quotes from a plaque in an exhibit in the American Museum of Natural History's Hall of Biodiversity: "Right now we are in the midst of the Sixth Extinction, this time caused solely by human transformation of the ecological landscape (Kolbert 2014, p 267)."

Joseph Stiglitz, winner of the Nobel Prize in Economics, in his book, *The Price of Inequity*, links economic inequity and ecological degradation to irresponsible government policies. Governments have allowed exploitation of natural resources to provide unearned "rents" or profits for corporations rather than to benefit the rightful owners of the resources—the people in common. Stiglitz documents that recent growth in the US economy has been captured almost entirely by the wealthiest Americans—by the top ten percent and mostly the top one percent. "For the past 30 years, we've become increasingly a nation divided; not only has the top been growing fastest, but the bottom has actually been declining (Stiglitz 2013, p 5)." The richest 20 % of Americans earn more, after taxes, than the bottom 80 % combined. He makes the case for a Green GDP, which includes social and ecological indicators of progress as well as the usual economic indicators.

In his Encyclical, *Laudato Si*, Pope Francis focuses on the social and economic roots of growing threats to "our common home"—the earth. "We are faced not with two separate crises, one environmental and the other social, but rather with one complex crisis which is both social and environmental. Strategies for a solution demand an integrated approach to combating poverty, restoring dignity to the excluded, and at the same time protecting nature (Francis 2015, paragraph 139)."

Naomi Klein, in her widely heralded book, *This Changes Everything*, goes beyond most other social critics in addressing questions of sustainability. She focuses on the challenge of global climate change; however like Pope Francis, she

emphasizes that climate change is but a symptom of major ecological, social, and economic problems that threatens the future of human life on earth. Addressing the root causes of climate change ultimately will "change everything." She writes: "So this book proposes a different strategy: think big, go deep, and move the ideological pole far away from the stifling market fundamentalism that has become the greatest enemy of planetary health. Maybe within a few years, maybe some of the ideas highlighted in these pages… will start to seem reasonable, even essential (Klein 2014, p 266)."

Pope Francis points to the negative effects of relying on economic value and supports Klein's call for a radical change in thinking. "The economy accepts every advance in technology with a view to profit, without concern for its potentially negative impact on human being. Some circles maintain that current economics and technology will solve all environmental problems, and argue, in popular and non-technical terms, that the problems of global hunger and poverty will be resolved simply by market growth. They may not affirm such theories with words, but nonetheless support them with their deeds by showing no interest in more balanced levels of production, a better distribution of wealth, concern for the environment and the rights of future generations. Their behavior shows that for them maximizing profits is enough (Francis 2015, paragraph 109)." Pope Francis challenges us "to move forward in a bold cultural revolution (Francis 2015, paragraph 114)."

Inadequacy of Economic Value

The sustainability of human life on earth depends on looking deeper than economic self-interest in meeting the ecological, social, and even long-run economic challenges of sustainability. Economic sustainability will require a bold spiritual revolution to restore a deeper sense of purpose to the economy. We must come to understand that economic value is inherently *individual, instrumental, and impersonal*—at least as we understand economic value today.[1] Economic value accrues to individuals or collections of individuals, rather than to communities or societies as wholes. Economic value is instrumental, in that an economic relationship or transaction is always a means to an end, rather than something done because of its inherent worth. Economic value is also *impersonal*, because if something cannot be bought, sold, or traded among people, it has no economic value.

As a result, the economy places a premium on the present relative to the future. For example, it is not "economically rational" to invest in anything if the returns on investment are likely to be realized only after the investor is dead. Since life is

---

[1]Significant portions of the text concerning economic, social, and ethical values are paraphrased from: Ikerd, John. (2012). *The Essentials of Economic Sustainability.* Bloomfield, CT: Kumarian Press, 1–14, and Ikerd, John. (November, 2014). Deep Sustainability; Rediscovering our Connectedness, *About Place Journal*, III-II. Retrieved from http://aboutplacejournal.org/voices/s1-iii-ii/john-ikerd-iii-ii/.

inherently uncertain, investments that promise quicker returns are valued more highly than comparable investments with longer term payouts. That is the reason borrowers are willing to pay interest and lenders charge interest on loans. Investments in future generations may have *long-term* economic benefits, but economic value is inherently *short-term*. There are simply no economic incentives to care for the earth or to care about social or economic inequity if the benefits will accrue solely to those to some future generation. A society that is motivated solely or even predominantly by economic value will not make the investments in nature and society that are absolutely essential for economic sustainability.

Obviously, most people do not make "economically rational" decisions, meaning decisions motivated solely by short-run self-interests. Most people invest significant amounts of their time, energy, and money in things they value socially and ethically, even when they have no economic incentive to do so. Corporations, on the other hand, are not *real* people and thus have *no capacity* for ethical or social values. With thousands of investors scattered all around the world—investing through mutual funds and pension funds using electronic trading—the only value investors share in *common* is their desire to enhance the economic value of their stock. With the global economy dominated by transnational corporations, the future of humanity is in peril.

Unlike economic values, social values are *personal*; the particular person involved in a social relationship matters. You cannot buy, sell, or trade a friend or a spouse—such relationships are personal. Social values are instrumental but, unlike economic relationships, the reciprocity involved in social relationships is informal or casual. Perhaps most important for sustainability, social values evolve into cultural and ethical values. Thoughtful people eventually discover they should show the same empathy, compassion, and respect for everyone that they show for people they know personally—if they expect to live in an equitable and just society. Unlike economic and social values, ethical values are *non-instrumental*; ethical people do things simply because they feel they are the "right things to do," with no expectations of anything more in return. Ethical value is also impersonal and communal in nature. What is right and good for one person is right and good for everyone, including those of future generations.

Fortunately, social and ecological ethics can transcend societal and culture values. A person's ethical values can also reflect his or her sense of spiritual connectedness or consciousness. This deeper sense of morality is reflected in an intuitive sense of rightness and goodness rooted in the *spiritual* experience or sense of self, rather than in one's social relationships. The dominant global cultures today value only those concepts and ideas that can be validated rationally through observation and analysis using accepted "scientific methods." This materialistic approach to understanding denies the existence of purpose and meaning beyond serving some physical need or tangible preference. Today's culture places a higher priority on economic value than on social or cultural values and denies or ignores the existence of spiritual value. Economic sustainability will require a spiritually driven cultural revolution.

Sustainability is ultimately a question of morality. There is no economic value in doing anything for the sole benefit of others and certainly not for others of future generations. There is no social value in doing anything for those with whom we will not and cannot have personal relationships, including those of future generations. The only reason to invest time, energy, and money to ensure the sustainability of human life on earth is because doing so has ethical or spiritual value: because it is the right and good thing to do. It is not a sacrifice because it gives purpose and meaning to our lives—and the payoff is immediate. A sustainable economy must be rooted in spiritual value.

The spiritual revolution ultimately must lead to an intellectual revolution. When Kolbert, for example, writes about various possibilities for the future, she mentions that extinction of the human race, or at least a massive human die-off, might be inevitable. She apparently believes humans may simply be suffering the same fate as any other "non-thinking" species that finds itself in a position of dominance in its ecosystem and will blindly use up or destroy the resources upon which it depends. She also suggests that in the absence of biodiversity, human ingenuity and technology might sustain human life on earth—or perhaps another planet. Kolbert dismisses the suggestion that the "current extinction could be averted if people just cared more and were willing to make more sacrifices"—it "misses the point," she writes. "It doesn't much matter whether people care or don't care. What matters is that people change the world (Kolbert 2014, p 266)." Why should we believe people will change the world, if they don't care?

Stiglitz's remedy for growing economic and social inequity is a relatively modest public policy agenda. He writes, "It's not a matter of eliminating inequity or creating full equity of opportunity. It's just a matter of reducing the level in inequity and increasing the extent of equality of opportunity. The question is, can we get there (Stiglitz 2013, p 159)." He suggests two possibilities for "getting there": one is revolution, and the other is reclaiming the American democracy. As close as Stiglitz comes to appealing to ethics and morality is in suggesting a return to the American values that Tocqueville referred to in the early 1800s as "self-interest properly understood (Stiglitz 2013, p 161)"—linking individual well-being with the common good. Nowhere does Stiglitz identify the need for spiritually guided revolution or reclamation of democracy as being essential for social inequity or sustainability. Lacking a spiritual awakening, why should we believe changes in government policies will be anything more than new licenses to continue economic exploitation?

Klein goes farther than anyone of public prominence prior to Pope Francis to call for deep and lasting change. She sees reason for hope because she believes we are in the midst of a great social and political awakening. She writes: "There is little doubt that another crisis will see us in the streets and squares once again…. These moments when the impossible seems suddenly possible are excruciatingly rare and precious. The next time one arises, it must be harnessed not only to denounce the world as it is and build fleeting pockets of liberated space. It must be the catalyst to actually build the world that will keep us all safe (Klein 2014, p 466)." It is not surprising that Klein was invited by Pope Francis to participate in one of his initial

panel discussions of the Encyclical, *Laudato Si*. That being said, Klein did not go beyond Indigenous peoples' rights in exploring the spiritual roots of deep and lasting change that she advocates.

Deep Sustainability

The deep, fundamental change in thinking essential for sustainable economic development might logically be called "deep sustainability." Deep sustainability as defined by Ikerd, Gamble, and Cox, "addresses the ethical, philosophical, and spiritual roots of human well-being that must sustain the ecological, social, and economic integrity of human relationships with each other and with nature (Ikerd 2015, paragraph 4)," It addresses questions of moral and spiritual *sufficiency* of humanity, as well as economic *necessity*. Others have addressed the concept of deep sustainability but have not addressed the spiritual dimension directly, instead limiting the depth of their discussion to social values and ethics.

> ***Spiritual Roots of Economic Sustainability: A Case Study****On May 24, 2015, Pope Francis released his Encyclical Letter: Laudato Si on Care of our Common Home.** *In the Encyclical, he emphasized that his message was not meant only for members of the Catholic Church, Christians, or even people faith, but for everyone.*
>
> *In the Encyclical, Pope Francis clearly treats our relationship to earth to be spiritual as well as physical. He quotes Archbishop Patriarch Bartholomew: "For human beings… to destroy the biological diversity of God's creation; for human beings to degrade the integrity of the earth by causing changes in its climate, by stripping the earth of its natural forests or destroying its wetlands; for human beings to contaminate the earth's waters, its land, its air, and its life—these are sins. To commit a crime against the natural world is a sin against ourselves and a sin against God (para. 8)." The "sickness" in the soil, water, air, and life is rooted in a sickness in "our heart"—in the human spirit (para. 2).*
>
> *Pope Francis addresses the question of sustainable development directly. "The urgent challenge to protect our common home includes a concern to bring the whole human family together to seek a sustainable and integral development" (para. 13). "The notion of the common good also extends to future generations.… We can no longer speak of sustainable development apart from intergenerational solidarity. We can no longer view reality in a purely utilitarian way, in which efficiency and productivity are entirely geared to our individual benefit. Intergenerational solidarity is not optional, but rather a basic question of justice, since the world we have received also belongs to those who will follow us" (para. 159).*
>
> *Pope Francis recognizes that sustainability initiatives, which have been beneficial in some respects, have not brought us closer to integral and*

sustainable development. "Rivers, polluted for decades, have been cleaned up; native woodlands have been restored; landscapes have been beautified… advances have been made in the production of non-polluting energy and in the improvement of public transportation" (para. 58). "At the same time we can note the rise of a false or superficial ecology which bolsters complacency and a cheerful recklessness." These superficial ecologists argue that "apart from a few obvious signs of pollution and deterioration, things do not look that serious, and the planet could continue as it is for some time. Such evasiveness serves as a license to carrying on with our present lifestyles and models of production and consumption" (Sec 59).

Questions:

1. *Do you believe the challenges of sustainability are inherently spiritual? Why or why not?*
2. *What do you think Pope Francis means by integral and sustainable development?*
3. *What is our opinion of what Pope Francis calls "superficial ecologists"?*

*Francis. (2015). "Encyclical Letter *Laudato Si'* Of The Holy Father Francis On Care For Our Common Home," Libreria Editrice Vatican. Retrieved from http://W2.Vatican.Va/Content/Francesco/En/Encyclicals/Documents/Papa-Francesco_20150524_Enciclica-Laudato-Si.html.

Professor Stuart Hill, of University of West Sydney in Australia, for example, has written extensively of the *psychological roots of sustainability and deep organics*. He challenges us to move "through 'efficiency' and 'substitution' stages to 'redesign' approaches (Hill 2007, paragraph 3; Hill 2009)." Hill concludes: "The good news is that progress is well within our reach, but we do need to be willing to work on this in an integrated way at personal, social and ecological levels. This means… reclaiming our power and awareness, revising our visions and goals, and reflecting on our values and world-views. It also means collaborating across differences to find commonalties and learning from nature and indigenous knowledge, and from those who know about them. Perhaps most importantly, it requires us to become better at working with the unknown"

John Foster of Lancaster University in England has written: "I call the sense in which 'sustainable' is predicable of frames of mind, and then by extension of a society in which they predominate, *deep sustainability*. What this term points to is essential to the overall sustainability concept of safeguarding the human future by living with the grain of nature (Foster 2002, paragraph 11)." He refers to "frame of mind… as a loosely cohering set of dispositions to value and believe, together with tendencies to action… which have sedimented over time—amounting overall to a specific style of sense-making (Foster 2002, paragraph 10)." Both Hill and Foster define deep

sustainability as sustainability rooted in values, beliefs, and worldviews—rather than solely in science, ecology, and economics.

Neither Hill nor Foster addresses the spiritual roots of sustainability directly, other than in terms of indigenous and contemporary human cultures. Rohana Ulluwishewa goes beyond Hill and Foster in his book, *Spirituality in Sustainable Development*. He makes a compelling case that the root cause of the consistent failures of previous sustainable development initiatives is their reliance on bringing about development by changing the external economic, social, or political environment. He reframes sustainable development as a process that must begin "internally," within the individual, rather than externally, in the natural environment or society. He claims that sustainable development begins with an individual and collective spiritual transformation from "selfishness" to a deeper self that values "selflessness."

Ulluwishewa does not use the term "deep sustainability" in his book, but his approach to sustainability is very much in harmony of the approach of Ikerd, Gamble, and Cox. Deep sustainability, which begins with a rethinking of the concept of *self*. "We are not just physical and mental beings; we are also spiritual beings (Ikerd 2014, Paragraph 4)." The "intentional self" that is necessary for sustainability is an "emergent property" of the person understood as an integral whole. The *spiritual* self gives purpose to the intention of the *mental* self, which initiates actions carried out by the *physical* self.[2] Lacking any one of the three dimensions of self, the intentional actions essential for sustainability are impossible. Intention without the ability to act is of no consequence, and without a sense of purpose, there can be no intention that guides actions toward sustainability.

Deep sustainability recognizes that we are spiritually connected with each other and with nature. The earth is our sacred trust, and stewardship of nature and society is our sacred responsibility. Deep sustainability reflects an understanding that humans are physically, mentally, and spiritually interconnected with all of the living and non-living things of the earth. It recognizes that all of the other living and non-living things on earth each have a purpose to fulfill within the higher order, as do we, and from our unique purposes we each acquire intrinsic or spiritual value beyond any potential economic value. Deep sustainability respects that human beings are *integrally* connected with each other and with all of the other *beings* on earth and that we share a mutual dependence on the well-being of the integral whole.

Volumes have been written and spoken over the past few decades about the various dimensions of sustainability—in scientific journals; global, national, and regional reports; books by scientists and journalists; television, radio, YouTube; blogs and social media. However, only a small fraction of this mass of information

---

[2]Significant portions of the concerning deep sustainability and spirituality can also be found in Ikerd, J, Gamble, L, and Cox, T. (2015). Deep Sustainability, The Essentials. Creative Commons. Attribution-ShareAlike 4.0 International License. Retrieved from https://sites.google.com/site/sustainabilitydeep/, and Ikerd, J. (2014). Deep Sustainability; Rediscovering our Connectedness, *About Place Journal*, III-II. Retrieved from http://aboutplacejournal.org/voices/s1-iii-ii/john-ikerd-iii-ii/.

has addressed sustainability at anything beyond a shallow, instrumental, or precursory level of using natural resources more efficiently and substituting renewable for non-renewable sources of materials and energy. Naomi Klein devotes an entire section of *This Changes Everything* to the failures of shallow or instrumental approaches to addressing climate change in particular and sustainability in general. She documents the means by which "Big Business" had coopted "Big Green" through corporate corruption of the environmental movement. Prior to Pope Francis' Encyclical, *Laudato Si*, the spiritual dimension of sustainability has been largely ignored by prominent advocates of sustainability.

It might seem logical to question whether the specific motivation for change is actually important if other motivations could achieve similar results. As Gregory Bateson asks in his, *Steps to an Ecology of Mind*, "Is it important that the right things be done for the right reasons? (Bateson 2002, p 512)" He answers in the affirmative: "The ecological ideas implicit in our plans are more important than the plans themselves (Bateson 2002, p 512)." The moral and ethical roots of the quest for sustainability are more important than the various strategies we might pursue for reducing the ecological and social impacts of economic development. As Pope Francis points out in *Laudato Si*, most contemporary initiatives designed to address the environmental or social dimensions of sustainability only serve as "a license for continuing unsustainable lifestyles and approaches to production and consumption (Francis 2015, paragraph 59)."

Reclaiming the Purpose of the Economy

That being said, eliminating economic considerations is not an option, unless we choose to return to self-sufficiency. Neither can we eliminate markets, unless we are willing to rely on bartering and gifting with people that we know personally. Today's economies are simply too complex to rely completely on personal relationships. Central planning has never succeeded in completely replacing markets. In order to survive, centrally planned economies have been forced to rely on markets to meet many of the needs of individuals. Even with supercomputers, unique human needs and wants cannot be reduced to digital values for electronic manipulation.

Fortunately, it will not be necessary to eliminate markets to ensure economic sustainability. However, markets in sustainable economies must function within the social and cultural limits and bounds of moral and just societies—which in turn must reflect the limits and bounds of nature. People also must be motivated to come together though governance to serve the "common good"—to do those things essential for sustainability that markets quite simply are incapable of doing. Furthermore, governments must protect the "good of the commons (Ikerd 2005, pp 139–152)"—both society and nature. Laws and regulations must reflect the consent of the governed to restrain our individual self-interests in deference to the greater good. One may choose to call this sustainable capitalism, sustainable socialism, or some other name, but economic sustainability requires that ethical and social values be given priority over individual economic preferences.

Economic sustainability will require a renewed understanding that the purpose of the economy is not simply to extract economic value from nature and society, but instead is to support the higher and greater, long-term purpose of human societies and humanity. *Classical* economists clearly understood that the purpose of an economy is to facilitate the pursuit of happiness or overall human well-being, not simply to generate income or economic wealth. The framers of the *American Declaration of Independence* listed life, liberty, and the pursuit of happiness among the unalienable rights of all people. People of those times understood that the right to possess private property was but a means of pursuing happiness, not an end in itself. Early economists, such as Adam Smith and Thomas Malthus, clearly accepted happiness as the ultimate goal of all economic activity. Money was simply a means of acquiring the "material requisites" for happiness.

In the late 1800s, as Luigini Bruni explains, the focus of economics shifted from the pursuit of happiness to the pursuit of income and wealth (Bruni 2004). Vilfredo Pareto freed economics from the subjectivity of sociology and psychology by focusing on "revealed preferences" as a means of measuring economic value (Pareto 1971). Obviously, rational persons would make choices among alternatives that increased their satisfaction or happiness, including how to spend their money. An earlier neoclassical economist, Alfred Marshall, conceded that with the abandonment of subjectivity, economics no longer dealt directly with human *well-being*, his term for happiness, but rather with the "material requisites" (Marshall 1890, p 27) for well-being.

Pareto's theories eventually were adopted by other economists, presumably because they allowed economists to focus on observable and measurable human behavior. John Hicks and R.G.D. Allen replaced classical consumer theory with new consumer theory, which relied solely on preferences of consumers—laying the foundation for *neoclassical* economics (Hicks 1934). Neoclassical economists eventually redefined the whole of economics in terms of quantifiable economic variables in order to accommodate their sophisticated mathematical and statistical models. Paul Samuelson, beginning in the 1930s, and a host of other "quantitative economists" since have completely rewritten the once-subjective logic of economics into the languages of mathematics and statistics (Weinstein 2009, Wikipedia 2015b).

Economists today largely ignore the limits of *neoclassical* economics identified by Marshall and the *classical* economists before him. By 1992, economist Gary Becker was awarded the *Nobel Memorial Prize in Economic Science*, for his theories that all human behavior, even benevolence and altruism, could be rationalized as economic, self-seeking behavior (Wikipedia 2015a). Social responsibility and morality have been subsumed within the realm of economic self-interests. In economic thinking today, there is no difference between economic behavior and social or moral behavior. The pursuit of happiness is synonymous with the pursuit of wealth.

Economic sustainability demands a return to the classical purpose of the economy as a means of providing the "material requisites" for human happiness. Furthermore, the pursuit of the material requisites for happiness cannot be allowed to

detract from the social relationships and the spiritual sense of purpose that are also essential for human happiness. To facilitate the pursuit of happiness, the economy must function within the social and ethical bounds of an equitable and just society.

The Greek philosopher Aristotle referred to happiness as *eudemonia*.[3] He wrote that eudemonia is inherently social in nature, in that it is realized within families, friendships, communities, and society. Furthermore, he believed that human happiness was a natural consequence of a "life of virtue." Admittedly, Adam Smith, in his most famous book, *The Wealth of Nations,* focused on income and wealth. However, Smith did not state that the butcher, baker, or brewer was motivated only by self-interest or self-love. As explained by Robert Black, Smith clearly believed that people were motivated by benevolence as well as self-interests (Black 2006). He simply observed that under the market conditions of his times, people did not need to depend on benevolence because self-interest provided sufficient motivation.

Smith's writings also reflect a clear understanding that pursuit of individual economic self-interests should not take precedent over one's social and moral responsibilities. In his book, *The Theory of Moral Sentiments*, Smith wrote: "The wise and virtuous man is at all times willing that his own private interest should be sacrificed to the public interest of his own particular order or society. He is at all times willing, too, that the interest of this order or society should be sacrificed to the greater interest of the state or sovereignty, of which it is only a subordinate part. He should, therefore, be equally willing that all those inferior interests should be sacrificed to the greater interest of the universe, to the interest of that great society of all sensible and intelligent beings, of which God himself is the immediate administrator and director (Smith 1759, paragraph VI.II.46, 206)." Smith's *Theory of Moral Sentiments* seems quite compatible with the philosophy of deep sustainability.

Restoring Hope to the Economy

Deep sustainability is not a philosophy of despair but of hope—a belief in the possibility of deep and lasting happiness. The quest for economic sustainability, rooted in spirituality, creates an opportunity for a fundamentally better future for humanity: a future rooted in purpose, meaning, and spirituality. Ulluwishewa explains that true happiness is fundamentally different from the sensory pleasures or pain associated with economic self-interest. "We feel happy when our mind in extraordinarily calm, quiet, peaceful and tranquil, when we help a stranger, when we make someone else happy, when we give and receive love (Ulluwishewa 2014, p 88)." True happiness is not a consequence of acts of *selfishness*, but instead acts of *selflessness*—as in those essential for sustainability.

---

[3]Edward Clayton, *The Internet Encyclopedia of Philosophy*, "Aristotle (384-322 BCE.): Politics," 2015, from Book II, Chap. 3 of the *Physics* and Book I, Chap. 3 of the *Metaphysics.* Retrieved November 19, 2015. http://www.iep.utm.edu/a/aris-pol.htm#H5.

There are endless possibilities for improving prosperity or quality of life even without economic growth, when we focus on happiness rather than narrow economic self-interests. Even *classical* economist John Stuart Mill wrote optimistically about the prospects for continuing human progress or prosperity within what he called a "stationary state" economy. He wrote: "It is scarcely necessary to remark that a stationary condition of capital and population implies no stationary state of human improvement. There would be as much scope as ever for all kinds of mental culture, and moral and social progress; as much room for improving the Art of Living, and much more likelihood of its being improved (Mill 1848, paragraph IV.6.9)."

John Maynard Keynes, the most prominent *neoclassical* economist of the twentieth century, anticipated a transition to a sustainable economy. In the 1920s, he wrote that he thought the *economic problem* would be solved within a hundred years. He understood that the economy is but a means of meeting our basic material or tangible needs. He did not consider the economic problem to be *the permanent problem of humanity*, but only a temporary problem that eventually would be solved. The permanent problem of humanity, he wrote, is to learn the "true art of living," to use our freedom from pressing economic concerns to learn to live "live wisely and agreeably and well (Keynes 1931)."

Herman Daly, contemporary ecological economist, sees endless possibilities for human betterment or improving quality of life even with a sustainable, "steady-state" economy. He defines a steady-state economy as "one that develops qualitatively... without growing quantitatively in physical dimensions; a constant metabolic flow of resources from depletion to pollution maintained at a level that is both sufficient for a good life and within the assimilative and regenerative capacities of the containing ecosystem (Daly 2013, paragraph 1)." A steady-state economy would depend on *qualitative* development—including social and spiritual development—rather than *quantitative* development to sustain a life of prosperity, flourishing, or happiness for all.

The spiritual and cultural revolution essential for economic sustainability must be rooted in spirituality—in questions of purpose. In the words of Pope Francis, "What is the purpose of our life in this world? Why are we here? What is the goal of our work and all our efforts? What need does the earth have of us? It is no longer enough, then, simply to state that we should be concerned for future generations. We need to see that what is at stake is our own dignity. Leaving an inhabitable planet to future generations is, first and foremost, up to us (Francis 2015, paragraph 150)."

While the challenges of sustainability may seem overwhelming, the responsibility is not ours alone but ours collectively. In the words of Adam Smith, "The administration of the great system of the universe, however, the care of the universal happiness of all rational and sensible beings, is the business of God and not of man. To man is allotted a much humbler department, but one much more suitable to the weakness of his powers, and to the narrowness of his comprehension; the care of his own happiness, of that of his family, his friends, his country (Smith 1759, paragraph VI.II.49, 207)." We each are guided spiritually toward our unique purpose in caring for each other, caring for the earth, and in so doing helping to create a

sustainable future for humanity. No matter how humble our "department" may seem, we are all integrally interconnected, we are all as *one* in the spirit, and as *one* we can create a new sustainable economy and a new and better future for humanity.

Discussion Questions

1. In your opinion, what is the ultimate purpose of the economy? More specifically, what is the purpose of your economic decisions? In what, if any, sense do you feel economic decisions are motivated by spirituality?
2. Do you agree that concerns for sustainability are rational and logical only if there is some positive purpose for humanity? If so, what do you think is the ultimate source of purpose for human life—your life?
3. Are you aware of sustainability initiatives of corporations or government agencies that do beyond using natural resources more efficiently, to conserve resources for the future or reduce wastes and pollution, or substitute renewable resources for non-renewable resources, such as solar energy for fossil energy? If not, look up a few on the Internet. In what sense are these initiatives motivated by economic values, social values, or ethical values?
4. What do you see as the primary differences between "deep sustainability" and most contemporary approaches to sustainability? Do you believe deep sustainability will ever be acceptable in a culture that is dominated by "scientific objectivity" which requires observation, measurement, and "proof"?
5. In your mind, how is the pursuit of happiness different from the pursuit of income or wealth?

References

Bateson, G. (2002). *Steps to an ecology of mind*. Chicago: University of Chicago Press.

Black, R. (2006). What did Adam Smith say about self-love? *Journal of Markets and Morality, 9–1*, 7–34. Retrieved November 19, 2015 from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=958820

Bruni, L. (2004). *The history of happiness in economics*. London: Routledge, translating from C. Menger, Grundsatze der Volkswirtsschaftslehre, (Vienna: Braunmuller, 1871)

Clayton, E. (2015). *The internet encyclopedia of philosophy*. Aristotle (384-322 BCE.): Politics. http://www.iep.utm.edu/a/aris-pol.htm#H5

Daly, H. (1999). The lurking inconsistency. *Conservation Biology, 13*(4), 693–694. RetrievedNovember 19, 2015 from http://steadystate.org/the-lurking-inconsistency/

Daly, H. (2013). *Ten policies for a steady state economy, center for advancement of a steady state economy*. Retrieved November 19, 2015 from http://steadystate.org/top-10-policies-for-a-steady-state-economy/

Foster, J. (2002). Deep sustainability and the human future. *The Trumpeter, Journal of Ecosophy*. ISSN: 0832-6193. Retrieved November 19, 2015 from http://trumpeter.athabascau.ca/index.php/trumpet/article/view/118/125

Francis. (2015). *Encyclical letter Laudato Si' of the Holy Father Francis on care for our common home*. Retrieved November 19, 2015 from http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html

Hicks, J., & Allen, RGD. (1934). A reconsideration of the theory of value. *Economica*, *1*, 52–76.

Hill, S. (2007). *Psychological roots of sustainability*. Retrieved November 19, 2015 from http://www.stuartbhill.com/index.php/psychoroots

Hill, S. (2009). *From shallow to deep organics*. Retrieved from http://biodynamics2024.com.au/wp-content/uploads/2010/02/Deep-Organics.pdf

Ikerd, J. (2005). *Sustainable capitalism; A matter of common sense*. Bloomfield, CT: Kumarian Press.

Ikerd, J. (2007). *A return to common sense*. Flourtown, PA: R. T. Edwards Publishers.

Ikerd, J. (2012). *The essentials of economic sustainability*. Bloomfield, CT: Kumarian Press.

Ikerd, J. (2014). Deep sustainability; rediscovering our connectedness. *About Place Journal*, III-II. Retrieved November 19, 2015 from http://aboutplacejournal.org/voices/s1-iii-ii/john-ikerd-iii-ii/

Ikerd, J., Gamble, G., & Cox, T. (2015). *Deep sustainability; The essentials*. Retrieved November 19, 2015 from https://sites.google.com/site/sustainabilitydeep/

Keynes, J. (1931). *Essays in persuasion* (pp. 366–368). London: McMillian; Miami, FL: BN Publishing.

Klein, N. (2014). *This changes everything. capitalism versus the climate*. New York: Simon and Schuster.

Kolbert, E. (2014). *The sixth extinction—An unnatural history*. New York: Picador, Henry Holt & Company.

Marshall, A. (1890, 1946). *Principles of economics*. London: Macmillan.

Mill, J. (1848, 1909). *Principles of political economy with some of their applications to social philosophy*. London: Longmans, Green, and Co. Retrieved November 19, 2015 from http://www.econlib.org/library/Mill/mlP61.html

Pareto, V. (1971). *Manual of political economy*. New York: Kelly (original copyright, 1906).

Smith, A. (1759, 2013). *The theory of moral sentiments*. Middletown, DE: Economic Classics.

Stiglitz, J. (2013). *The price of inequity—How today's divided society endangers our future*. New York: W. W. Norton & Company.

Ulluwishewa, R. (2014). *Spirituality and sustainable development; Toward happiness-oriented development*. London: MacMillan Publishers.

Weinstein, M. (2009). *New York Times, economy*. Retrieved from http://www.nytimes.com/2009/12/14/business/economy/14samuelson.html?pagewanted=all

Wikipedia. (2015a). *Gary Becker*. Retrieved from http://en.wikipedia.org/wiki/Gary_Becker

Wikipedia. (2015b). *Paul Samuelson*. Retrieved from https://en.wikipedia.org/wiki/Paul_Samuelson

Higher Consciousness for Sustainability-as-Flourishing

8

Dennis Heaton

Abstract

Human activity has been fundamentally disturbing planetary systems of our Earth. To solve the problems that we have created so far needs a different level of consciousness. The potential range of human development includes higher states of consciousness in which human awareness is profoundly connected to the holistic functioning of nature. By functioning in higher states of consciousness, it is possible to not just overcome the challenges of sustainability, but to advance toward flourishing—an optimal quality of life individually and collectively. Ancient Vedic seers were awake to the dynamic laws of nature's intelligence in their own Transcendental Consciousness. From their cognitions, they brought out practical knowledge concerning life in accord with natural law. Two of the technologies from this Vedic system of knowledge are the Transcendental Meditation® (TM) technique and Maharishi Vedic[SM] Architecture. Extensive research has examined effects of the TM technique on the mind and body, including development to advanced levels of psychological development. Vedic Architecture aims to promote mental clarity, health, and good fortune for inhabitants. The case of 2000 Tower Oaks Boulevard, the largest commercial office building combining Vedic Architecture and green building, illustrates the application of Vedic technologies to harmonize human life with the ordering intelligence of nature.

D. Heaton (✉)
Maharashi University of Management, Fairfield, USA
e-mail: dheaton21@gmail.com

The Sustainability Challenge

Geologists have introduced the concept of the Anthropocene as a way to mark a new geological era in which humans are now fundamentally altering planetary systems. The impacts of human activity have transgressed the boundaries of Earth systems, resulting in climate change, biodiversity loss, and nitrogen cycle disruption.[1] Ecologists predict: "We face both local and global coupled multiscalar crises of geopolitical instability, resource scarcity, and economic collapse."[2] Environmental scientists can expertly measure "but seem unable to prevent"[3] this impending sustainability crisis. Thus, there is a need for management scholars and others from the behavioral sciences to "properly address the magnitude and scope of this shift to the Anthropocene."[4]

According to John Ehrenfeld, the scale of the sustainability challenge faced by humanity calls for "a fundamental shift in our way of thinking that goes to the core of who we are as human beings[5] … a movement to reexamine who we are, why we are here, and how we are connected to everything around us."[6] Einstein observed, "We cannot solve the problems that come with the world we have made thus far from the same level of consciousness at which we created them."[7]

This chapter describes the possibility of shifting to higher consciousness, from which we have a different frame for knowing ourselves, our purpose, and our connectedness. We present theory, research, and practical programs concerning the possibility that individual and collective consciousness can develop in a way that can profoundly correct the negative environmental impacts of human activity. We introduce a conceptual discussion of higher states of consciousness which are said to entail the capacity for holistic awareness, holistic concerns, and holistic actions so that humans and other life can be not just sustained, but can "flourish on Earth forever."[8]

Ehnrenfeld introduced the phrase "sustainability-as-flourishing" which we have used in the title of this chapter. According to Ehrenfeld, words that come close to

---

[1]Johan Rockström, Will Steffen, Kevin Noone, Åsa Persson, F. Stuart Chapin, Eric F. Lambin, Timothy M. Lenton, Marten Scheffer, Carl Folke, Hans Joachim Schellnhuber, Björn Nykvist Cynthia A. de Wit, Terry Hughes, Sander van der Leeuw, Henning Rodhe, Sverker Sörlin, Peter K. Snyder, Robert Costanza, Uno Svedin, Malin Falkenmark and Louise Karlberg, "A safe operating space for humanity," *Nature* 461 (24 September 2009): 472–475.

[2]Sverker Sörlin, "Environmental turn in the human sciences," *The Institute Letter* (Summer 2014): 1.

[3]Sorlin, "Environmental turn in the human sciences", 12.

[4]Andrew J. Hoffman and P. Devereaux Jennings, "Institutional theory and the natural environment: Research in (and on) the Anthropocene," Organization & Environment 20, no. 1 (March, 2015): 8.

[5]John Ehrenfeld and Andrew J. Hoffman, *Flourishing: A frank conversation about sustainability* (Stanford, CA: Stanford University Press, 2013), 4.

[6]Ehrenfeld and Hoffman, "Flourishing," ix–x.

[7]David L. Cooperrider. and Gurudev S. Khalsa, "The organization dimensions of global environmental change," *Organization & Environment,* 10 no. 4 (December 1997): 335.

[8]Ehrenfeld and Hoffman, "Flourishing," 17.

the meaning of flourishing are "*thriving, healthy, authentic, whole*—or *wholesome*…
but *flourishing* expresses the image of plants and flowers as they develop and unfold…
It is the positive image of a world that is working for humans and everything else."[9]

Consciousness Development for Sustainability-as-Flourishing

To elucidate the relationship of higher consciousness to sustainability-as-flourishing,
we first present a model of the range of potential human development. We start with
psychological theories from Western psychology and then add an extended range of
development described as higher states of consciousness in Eastern psychology.
Developmental psychology in the West has observed that there are "maturational
differences in the way individuals make sense, experience, and act upon reality
through the lens of various stages of consciousness."[10] Developmental psychologists
depict development as a sequence of stagelike shifts in the cognitive, interpersonal,
and moral structures through which they make meaning of their lives.[11] "Each
successive level of mental complexity is formally higher than the preceding one
because it can perform the mental functions of the prior level as well as additional
functions."[12] Only a small percentage of adults reach higher stages of development,
known as postconventional.[13]

The limited effectiveness of human society in resolving the challenges of sus-
tainability can be seen as related to the limited consciousness development which is
the norm in the majority of the population. Recent research found that small- and
medium-sized companies recognized for environmental leadership tended to have
leaders who were measured at postconventional levels of development, but in
comparison companies that were not engaged in sustainability concerns, the leaders
were at more common but less mature stages.[14] The researches explain that upper
stages of consciousness development "include a broader and systemic perspective,
long-range focus, integration of conflicting goals, collaboration with stakeholders,
complexity management, and collaborative learning."[15] At postconventional levels
of development, one can take a systems view on reality, integrate ideas, create

---

[9]Ehrenfeld and Hoffman, "Flourishing," 22.

[10]Olivier Boiral, Charles Baron, and Olen Gunnlaugson, "Environmental leadership and
consciousness development: A case study among Canadian SMEs," *Journal of Business Ethics*
123, no. 3 (September, 2014): 363–383.

[11]Jane Loevinger, *Ego development: Conceptions and theories* (San Francisco: Jossey-Bass,
1976).

[12]Robert Kegan and Lisa L. Lahey, *Immunity to change: How to overcome it and unlock potential
in yourself and your organization*. (Boston: Harvard Business Press, 2009), 21.

[13]Angela H. Pfaffenberger, Paul W. Marko, and Allan Combs, eds., *The postconventional
personality: Assessing, researching, and theorizing higher development* (Albany, NY: SUNY
Press, 2011).

[14]Boiral et al., "Environmental leadership and consciousness development.".

[15]Ibid., 363.

long-term visions with profound purposes, and build truly collaborative relationships.[16]

In simple terms, developmental psychology has understood that capacities for different ways of knowing unfold as the mind matures. The challenge of sustainability requires being able to understand the complexity of both social and physical aspects of the environment and to act in tune with the wholeness of nature, so as to not to create undesired side effects. While the capacity to take systemic perspectives and manage complexity does grow with postconventional development, a still more ideal development of fitness for sustainability-as-flourishing has been put forth in the writings of Maharishi Mahesh Yogi about higher states of consciousness.

Higher States of Consciousness

The trend of consciousness development is toward more integrated understanding and inclusive relationships. Higher states of consciousness described by Vedic psychology have been regarded as an extension of the psychological development observed in Western psychology.[17] According to Vedic psychology, psychological development culminates in "realizing the ultimate inseparability of the observer and the observed, leading to a completely unified view of self and the environment traditionally known as 'enlightenment' or 'unity consciousness'."[18] A similar conception of an enlightened developmental end-state has been expressed by developmental psychologist Robert Kegan as identifying one's self with "the oneness of the universe, which is something we have heard over and over again in wisdom literatures of the East and West."[19]

---

[16]Barrett C. Brown, *Conscious leadership for sustainability: A study of how leaders and change agents with postconventional consciousness design and engage in complex change initiatives* (PhD diss., Fielding Graduate University, Santa Barbara, California, 2011).

[17]Charles N. Alexander, John L. Davies, Michael C. Dillbeck, Carol A. Dixon, Roberta M. Oetzel, John M. Muehlman, and David W. Orme-Johnson, "Growth of higher stages of consciousness: Maharishi's Vedic psychology of human development", in Higher stages of human development: Perspectives on adult growth, edited by Charles N. Alexander and Ellen J. Langer, 286–341 (New York: Oxford University Press, 1990); Charles N. Alexander, Dennis Heaton, and Howard M. Chandler, "Advanced human development in the Vedic Psychology of Maharishi Mahesh Yogi: Theory and research." in *Transcendence and mature thought in adulthood*, edited by Melvin Miller and Susanne Cook-Greuter, 39–70 (Lanham, MD: Rowman and Littlefield, 1994); David W. Orme-Johnson, "An overview of Charles Alexander's contribution to psychology: Developing higher states of consciousness in the individual and society" *Journal of Adult Development, 7, no.* 4 (October 2000): 199–216.

[18]John S. Hagelin, "Is consciousness the unified field? A field theorist's perspective", *Modern Science and Vedic Science* 1, no. 1 (1987): 59.

[19]Elizabeth Debold, "Epistemology, fourth order consciousness, and the subject-object relationship, or… how the self evolves with Robert Kegan," *What is Enlightenment, 22* (Fall-Winter 2002): 2.

The higher states of consciousness depicted by Vedic psychology are based on a subjective methodology of research through which consciousness, which normally is directed toward objects and bound within thoughts, can transcend thinking and experience a restful silent state. In this experience, consciousness is said to be self-referral—pure consciousness knows only itself; it is at once observer, observed, and process of observation—it is pure Being. This is called Transcendental Consciousness because it transcends time, space, and all relative, changing experience. Maharishi identifies Transcendental Consciousness as the spiritual essence of life: "eternal silence, which is pure wakefulness, absolute alertness, pure subjectivity, pure spirituality."[20] Vedic psychology describes a progression of higher states of consciousness which build from Transcendental Consciousness—the temporary experience of pure absolute transcendence in one's own silent awareness—to Unity Consciousness, in which the every point in creation is realized in terms of that absolute status.

Experience of Transcendental Consciousness reveals the intimate connection (called Yoga in the Vedic tradition) between individual consciousness and the self-referral intelligence which pervades nature and is the home of all the laws of nature. Maharishi explained that through the Transcendental Meditation technique:

> Spontaneously the conscious mind identifies itself with the self-referral unified field, the fountainhead of all the streams of activity in nature. As we gain more and more familiarity with that self-referral performance, our thoughts and actions spontaneously begin to be as orderly and evolutionary as all the activity of nature.[21]

Ṛk Veda, a source document of Vedic knowledge, records the subjective discovery that the transcendental field is where the wholeness of natural law can be known and can be harnessed:

> … the transcendental field, in which reside all the *Devas*, the impulses of Creative Intelligence, the Laws of Nature responsible for the whole manifest universe.
> … Those who know this level of reality are established in evenness, wholeness of life.[22]

This Vedic verse declares that by bringing one's awareness to the transcendental field one can live in wholeness. Life in wholeness, as Ehrenfeld observed, provides a foundation for sustainability: "Sustainability-as-flourishing refers to a state of Being… in which the individual realizes a sense of wholeness, completion, or perfection."[23]

---

[20]Maharishi Mahesh Yogi, *Maharishi University of Management: Wholeness on the move* (India: Age of Enlightenment Publications, 1995), 271 fn.

[21]Maharishi Mahesh Yogi, *Life supported by natural law* (Washington, DC: Age of Enlightenment Press, 1986), 97.

[22]Maharishi Mahesh Yogi, *Inaugurating Maharishi Vedic University* (India: Age of Enlightenment Publications, 1996), 138.

[23]Ehrenfeld and Hoffman, *Flourishing*, 18.

Engaging the Managing Intelligence of Natural Law

Maharishi University of Management: Wholeness on the Move presents a Consciousness-Based[SM] approach to management, which puts primary emphasis on harmonizing the individual manager with the managing intelligence of natural law. In that book, natural law is defined as "that infinite organizing power which sustains existence and promotes the evolution of everything in the universe, automatically maintaining the well-coordinated relationship of everything with everything else."[24] Nature exhibits holistic patterns of progressive change, so that change in one element does not create life-damaging influences—pollution—in other parts of the whole. Maharishi explains that the functioning of natural law does not create pollution "because in this theme of evolution in Nature, the part is always well connected with the whole, so that the total organizing power of Natural Law is persistently available to every stage of evolution of everything."[25]

The notion of a holistic organizing intelligence of natural law has been expressed by several modern thinkers. The astrophysicist Jantsch described a conscious universe which is self-organizing.[26] And the physicist Bohm spoke of the universe as an unbroken whole in which information about the whole—the implicate order—is enfolded in every part.[27] Harmon presented the outlook of deep ecology which "goes beyond the contemporary scientific framework to a subtle awareness of the oneness of all life, the interdependence of its multiple manifestations, and the irrepressibility of its tendencies towards evolution and transformation."[28] Such awareness, he argues, can lead business to achieve positive economic, environmental, and social impacts.

Recent discussions about the laws of nature by leading thinkers about sustainability highlight the critical value of setting the human mind to function like the functioning of nature. Senge et al. posed this question: "What would a way of thinking, a way of living, and ultimately an economic system look like that worked based on the principles of the larger natural world?"[29] An example of such natural principles is as follows: "In nature there is no waste; every by-product of one natural system is a nutrient for another."[30] In a similar vein, an article in *Harvard Business Review* has proposed that business operates in accord with the biosphere rules "which nature uses to assemble life and structure ecosystems."[31] Among the

---

[24]Maharishi Mahesh Yogi, *Maharishi University of Management: Wholeness on the move,* 8.

[25]Maharishi Mahesh Yogi, *Maharishi Vedic University Introduction* (India: Age of Enlightenment Publications, 1994), 299.

[26]Erich Jantsch, *The self-organizing universe* (Oxford: Pergamon Press, 1980).

[27]David Bohm, *Wholeness and the implicate order (*London: Ark Paperbacks, 1980).

[28]Willis Harmon, *Global mind change* (New York: Warner Books, 1988), 119.

[29]Peter M. Senge, Bryan Smith, Sara Schley, Joe Laur and Nina Kruschwitz, *The necessary revolution: Working together to create a sustainable world* (New York: Crown, 2010), 36.

[30]Senge et al., *The necessary revolution: Working together to create a sustainable world*, 37.

[31]Gregory C. Unruh, "The biosphere rules," *Harvard Business Review* 86, no. 2 (February 2008): 111–117.

biosphere rules which can sustain business are reusing and upcycling materials: "By reusing the same materials in an ever compounding cycle of evolutionary growth, the biosphere has sustained itself on planet Earth for billions of years."[32] The Natural Step is an approach to sustainability that puts forth four principles which are said to be derived from nature's laws of conservation of matter and thermodynamics; they include the following:

- not contributing to the buildup of substances extracted from the Earth's crust;
- not adding to the ecosphere chemicals and compounds produced by society;
- not depleting nature and natural processes;
- promoting justice to avert the destruction of resources.[33]

Benyus has advocated biomimicry—"doing it nature's way… to change the way we grow food, make materials, harness energy, heal ourselves, store information, and conduct business."[34] "Engage the managing intelligence of natural law,"[35] the motto of Maharishi University of Management, calls to mind the intent of biomicry, which is the conscious emulation of nature's genius. Whereas biomimicry learns from nature more through objective means of observation, Consciousness-Based management is a complementary approach which primarily entails practical and experiential methodologies which enliven the holistic intelligence of natural law in our psychology and physiology. Maharishi described how the human mind can gain the ability to function like nature:

> The functioning of transcendental pure consciousness is the functioning of natural law in its most settled state. The conscious human mind, identifying itself with this level of nature's functioning, gains the ability to perform in the style with which nature performs its activity at its most fundamental level.[36]

From this description of the potential of the human mind in higher states of consciousness, it can be argued that through technologies of Consciousness-Based management, business activity would take a direction toward being in accord with natural laws. We predict that this would result in measurable lean and green business improvements and in balanced national development, such as indicated by measures of Gross National Happiness.

---

[32]Unruh, "The biosphere rules", 117.

[33]Hilary Bradbury and Judith A. Clair, "Promoting sustainable organizations with Sweden's Natural Step," *Academy of Management Executive* 13, no. 4 (November 1999): 63–74.

[34]Jeanine Benyus, *Biomicry: Innovation inspired by nature* (New York: William Morrow, 1997).

[35]Maharishi Mahesh Yogi, *Maharishi University of Management: Wholeness on the move.*

[36]Maharishi Mahesh Yogi, *Life supported by natural law*, 31.

Wholeness Versus Partial Knowledge

In their paper "Exploring the Frontiers of Environmental Management: A Natural Law-Based Perspective," Steingard, Fitzgibbons, and Heaton[37] argue that the linear analytical approach of modern science has given us technologies which achieve specific ends but necessarily, because they are based on partial knowledge, produce unfortunate side effects which degrade our Earth. Why is this? Steingard et al. quote Maharishi:

> The whole field on Natural Law is so complex that it is not possible to select any specific law without taking into consideration the total involvement of all the Laws of Nature. All the Laws of Nature are so intimately connected that the isolation of any one law will create imbalance in any field of life.[38]

In contrast, Maharishi has explained the subjective approach of developing higher consciousness provides a means of gaining knowledge of the holistic value of natural law, to overcome these limitations of isolation and imbalance:

> A totality can only be handled from the source of the emergence of all this diversity. That source can be completely identified by the simplest human awareness. The simplest human awareness is transcendental consciousness, gained through Transcendental Meditation.[39]

According to this view, a manager functioning from a state of consciousness which is grounded in that source can spontaneously achieve progress without pollution.

Knowledge is different in different states of consciousness. The fragmented knowledge of modern science is a function of level of consciousness development which separates the knower from the known and sees the world in terms of divided parts. This level of consciousness development is not capable of providing knowledge of the holistic value of natural law at the level of Transcendental Consciousness and so leads to partial rather than holistic capacity to do as nature does. In Maharishi's analysis, the Transcendental Meditation program attunes individual intelligence with nature's intelligence so that management can become "as automatic, problem-free and ever progressive, and ever evolutionary as the administration of the universe through Natural Law."[40]

> Spontaneously the conscious mind identifies itself with the self-referral unified field, the fountainhead of all the streams of activity in nature. As we gain more and more familiarity with that self-referral performance, our thoughts and actions spontaneously begin to be as orderly and evolutionary as all the activity of nature.[41]

---

[37]David Steingard, Dale Fitzgibbons and Dennis Heaton, "Exploring the frontiers of environmental management: A Natural Law based perspective," *Journal of Human Values* 10, no. 2 (October 2004): 79–97.

[38]Maharishi Mahesh Yogi, *Maharishi Vedic University Introduction, 297.*

[39]Maharishi Mahesh Yogi, *Life supported by natural law*, 42.

[40]Maharishi Mahesh Yogi, *Maharishi University of Management: Wholeness on the move*, 8.

[41]Maharishi Mahesh Yogi, *Life supported by natural law*, 97.

The Difference Between Consciousness-Raising and Consciousness Development

The expression "consciousness-raising" is used to mean directing attention toward a particular phenomenon in order to bring it into conscious awareness for consideration and action. The term "development of consciousness" as used in this paper is not about paying attention or directing attention to particular content; rather, it is about developing the capacity for holistic awareness which can comprehend a broader range of considerations and generate more integrated solutions.[42] Piaget's research on the cognitive development of children provides a framework for understanding the development of consciousness.[43] At a certain stage, around age 7, there is a marked change in the way children understand, called concrete operations. A simplified illustration of this would be an experiment involving pouring water from a glass of one shape into a taller, narrower glass. The experimenter asks the child whether the quantity of water is the same in the new glass. With concrete operations, the child will conceive, and can explain, that the quantity is conserved even though the appearance is now taller. But before this shift in cognitive development, the consciousness of the child is more dominated by the changing impressions of the senses and would not explain that the volume of water is the same.

In the same way, the shift to Unity Consciousness can be conceived as a higher stage of cognitive development. In Unity Consciousness, the spontaneous cognition is that everything in the environment, including oneself, is one conscious, self-interacting system. In the language of cognitive development, Unity Consciousness is conservation of unity, identification with unity, across all changing experiences.[44] Whereas before this stage of cognitive development, the way that one understands and interacts with the environment is inevitably in terms of varying degrees of fragmented understanding and separation between observer and observed. Theorists such as Bohm[45] have argued that the world is a unified whole. It stands to follow then that if cognition has developed to be most unified, then our knowledge will be most veridical. Consequently, our behaviors can be most in synch with the systems of nature. As our cognitive development matures in the direction of higher states of consciousness, we naturally understand the reality of the connected wholeness of social and environmental systems, and naturally our aspirations and capabilities are more suited to realizing the balanced living which has been called "sustainability-as-flourishing."

---

[42]Dennis Heaton and Emanuel Schachinger with Chris Laszlo, "Consciousness development for responsible management education," in *Educating for responsible management: Putting theory into practice*, edited by Roz Sunley, Jennifer S. A. Leigh and Alan Murray (Sheffield, UK: Greenleaf, forthcoming 2016).

[43]Jean Piaget, *The Psychology of the child* (New York: Wiley, 1969).

[44]Alexander, et al., "Advanced human development.".

[45]David Bohm, *Wholeness and the implicate order*.

The Role of Vedic Science and Technology

Contrasting to the partial knowledge generated through modern science is the more holistic knowledge of Vedic Science[SM].[46] The origins of this knowledge are the traditional Vedas and Vedic literature, which are said to express what *rishis* or seers awakened to in the depth of their own consciousness.[47] Maharishi argued that the technologies passed down from these Vedic seers are a means to cultivate wholeness in life for balanced success in management. These technologies include Jyotish (Vedic astrology) which highlights the connection of the individual and the cosmos, Ghandarva Ved (classical Indian music)—sounds which harmonize human awareness to the rhythms and melodies of the universe, Āyur-Veda (natural medicine and prevention), Sthapātya Veda—Vedic Architecture, and other branches of the Veda and Vedic literature.[48]

Initially, Maharishi's teaching in the West concentrated on the TM technique. This led to numerous research studies regarding the effects of this meditation practice—during meditation and resulting from continued regular daily practice. TM[49] is a simple, natural practice from the Vedic tradition which is said to make the experience of Transcendental Consciousness accessible through an effortless means that is independent of matters of belief.[50] TM is learned through a seven-step course of instruction and is practiced 15–20 min twice a day, sitting comfortably with eyes closed. The individual begins appreciating a mantra—a sound without meaning—at "finer" levels in which the mantra becomes increasingly secondary in experience and ultimately disappears and self-awareness becomes primary. The TM technique represents a class of meditation practices which they call automatic self-transcending—which is fundamentally different in aim, procedure, experience, and brain activity than meditation practices involving focused attention or open monitoring.[51]

This specific form of meditation practice has been taught in a consistent manner around the world and thus has lent itself to scientific study. Research on effects of TM during meditation has observed a state of restful alertness distinct from eyes-closed relaxation or sleep, as evidenced by reductions in heart rate and oxygen

---

[46]Maharishi Mahesh Yogi, *Maharishi Vedic University Introduction*.

[47]Ken Chandler, "Modern Science and Vedic Science: An introduction" *Modern Science and Vedic Science* 1, no. 1 (1987): 5–28.

[48]Maharishi Mahesh Yogi, *Maharishi University of Management: Wholeness on the move*, 225.

[49]Norman Rosenthal, *Transcendence: Healing and transformation through Transcendental Meditation* (New York: Tarcher, 2011).

[50]Jonathan Shear, "Transcendental Meditation," in *The Experience of meditation: Experts introduce the major traditions*, edited by Jonathon Shear, 23–48 (St. Paul, MN: Paragon House, 2006).

[51]Fred Travis and Jonathan Shear, "Focused attention, open monitoring and automatic self-transcending: Categories to organize meditations from Vedic, Buddhist and Chinese traditions," *Consciousness and Cognition* 19, no. 4 (December 2010): 1110–1119.

consumption and increased brain wave (EEG) coherence.[52] The profound state of restful alertness gained during the practice is said to dissolve the stress in the mind and the body, leading to improvements such as reduction of high blood pressure,[53] reduced health insurance utilization,[54] and positive changes in creativity, fluid intelligence, constructive thinking, and reaction.[55] Statistical meta-analyses have reported that the TM technique produced three times the effect size of other meditation or relaxation practices on anxiety[56] and self-actualization.[57]

Of particular interest to this chapter is evidence that TM fosters consciousness development, as measured by common measures of ego development and moral reasoning.[58] Qualitative studies of managers practicing TM has found evidence of growth of big-picture thinking and collaboration[59] and broadened awareness that

[52]Charles N. Alexander, Robert W. Cranson, Robert Boyer and David W. Orme-Johnson, "Transcendental consciousness: A fourth state of consciousness beyond sleep, dreaming and waking" In *Sourcebook on sleep and dreams* edited by Jyane Gackenbach, 282–315. (New York: Garland, 1986); Fred Travis and Robert K. Wallace, (1999). "Autonomic and EEG patterns during eyes-closed rest and Transcendental Meditation (TM) practice: The basis for a neural model of TM practice," *Consciousness and Cognition* 8, no. 3 (September 1999): 302–318; Fred Travis, David A. F. Haaga, John Hagelin, Melissa Tanner, Alaric Arenander, Sanford Nidich, Carolyn Gaylord-King, Sarina Grosswald, Maxwell Rainforth and Robert H. Schneider, "A self-referential default brain state: Patterns of coherence, power, and eLORETA sources during eyes-closed rest and the Transcendental Meditation practice," *Cognitive Processing* 11, no. 1 (February 2010): 21–30.

[53]Robert H. Schneider, Frank Staggers, Charles N. Alexander, William Sheppard, Maxwell Rainforth and Kofi Kondwani, "A randomized controlled trial of stress reduction for hypertension in older African Americans. *Hypertension* 26, no. 5 (May 1995): 820–827.

[54]Robert E. Herron, Steven L. Hillis, Joseph V. Mandarino, David W. Orme-Johnson and Kenneth G. Walton, "Reducing medical costs: The impact of the Transcendental Meditation Program on government payments to physicians in Quebec," *American Journal of Health Promotion* 10, no. 3 (January/February 1996): 206–216.

[55]Kam Tim So and David W. Orme-Johnson, "Three randomized experiments on the longitudinal effects of the transcendental meditation technique on cognition," *Intelligence* 29, no. 5 (September-October 2001): 419–440; Robert W. Cranson, David W. Orme-Johnson, Jayne Gackenbach, Michael C. Dillbeck, Christopher H. Jones, Charles N. Alexander, "Transcendental Meditation and improved performance on intelligence-related measures: A longitudinal study," *Journal of Personality and Individual Differences* 12, no. 10 (October 1991): 1105–1116.

[56]Kenneth R. Eppley, Allan I. Abrams, and Jonathan Shear, "Differential effects of relaxation techniques on trait anxiety: A meta-analysis," *Journal of Clinical Psychology* 45, no. 6 (November 1989): 957–974.

[57]Charles N. Alexander, Maxwell V. Rainforth and Paul Gelderloos, "Transcendental Meditation, self-actualization, and psychological health: A conceptual overview and statistical meta-analysis," *Journal of Social Behavior and Personality* 6, no. 5 (October 1991): 189–247.

[58]Howard M. Chandler, Charles N. Alexander and Dennis P. Heaton, "The Transcendental Meditation program and postconventional self development: A 10-year longitudinal study." *Journal of Social Behavior and Personality* 17, no. 1 (2005): 93–121.

[59]Jane Schmidt-Wilk, "Consciousness-based management development: Case studies of international top management teams," *Journal of Transnational Management Development* 5 no. 3, (2000): 61–85.

embraces the wider interests of the community and environment.[60] Such findings suggest further research to consider how TM may contribute to actions and decisions that are more favorable to sustainability.

Another aspect of Vedic Science brought out by Maharishi Mahesh Yogi is Sthapātya Veda, which concerns principles of architecture and city planning. The predicted positive effects of structures built according to these principles are mental clarity, happiness, harmony, and good fortune of inhabitants. A study investigated two considerations from the principles of Sthapātya Veda: Houses with south entrances were found to have higher incidences of burglary, and sleeping with one's head to the north was associated with lower self-reported quality of life.[61] The 2000 Tower Oaks building described in the case below provides a setting to research the influences of a Vedic, green building on health and productivity. This case also illustrates the sustainability achievements of one business leader who has been personally dedicated to the practice of Transcendental Meditation.

> **Case Study**
> Jeffrey S. Abramson is a partner in The Tower Companies and advocate for Maharishi Vedic Architecture. Mr. Abramson is a long-time TM practitioner and a member of the Board of Trustees of The David Lynch Foundation, which provides scholarships throughout the USA for learning Transcendental Meditation. He is also Chairman of the Board of Trustees of Maharishi University of Management in Fairfield, Iowa.
>
> The Tower Companies is a three-generation, award winning, and family-owned real estate development company located in Rockville, Maryland, USA. This firm, the largest green developer in the Washington, DC area, is a carbon-neutral company and one of the largest purchasers of Green Energy in the USA. Recognition for the company include the following: Washington's Healthiest Companies award by SmartCEO, USGBC Award of Excellence for Sustainable Business of the Year in the National Capital Region, and Leadership Award for Green Power Purchasing from the Environmental Protection Agency and the US Department of Energy.
>
> The Harvard Business School/Harvard University Graduate School of Design produced a case study "Design Creates Fortune: 2000 Tower Oaks Boulevard"[62] on the 200,000 square foot LEED Platinum and Vedic

---

[60]Eva Herriott, Jane Schmidt-Wilk and Dennis Heaton, "Spiritual dimensions of entrepreneurship in Transcendental Meditation and TM-Sidhi program practitioners," *Journal of Management, Spirituality & Religion,* 6, no. *3* (September 2009): 195–208.

[61]Fred Travis, Anna Bonshek, Veronica Butler, Maxwell Rainforth, Charles N. Alexander, Ron Khare and Jonathan Lipman, "Can a building's orientation affect the quality of life of the people within? Testing principles of Maharishi Sthapatya Veda," *Journal Of Social Behavior & Personality*, 17, no. 1 (2005): 553–564.

[62]John D. Macomber and James H. Griffin, "Design creates fortune: 2000 Tower Oaks Boulevard" Harvard Business School Case No. 210-070 (Boston: Harvard Business Publishing, 2010).

Fig. 8.1 Photograph of 2000 Tower Oaks Boulevard

Architecture office building codeveloped by The Tower Companies and Lerner Enterprises (see photograph in Fig. 8.1*). This building's energy is 100 % from wind. Efficient design reduces energy usage by 41 % and reduces water consumption by 48 % (*http://toweroaks.com/*). The indoor environmental quality is enhanced through daylighting, thermal controls, and a three-stage outside air filtration system that removes 95 % of airborne pollutants. Building amenities include a green roof, a café that serves organic food, a 2500 square foot fitness center, and a Pilates/yoga/meditation room. The grounds are landscaped with over 17,000 drought-resistant native plantings of trees, ornamental grasses, and flowering bulbs.*

In addition to these environmental considerations, the building also followed principles of Vedic Architecture to create harmony and inspiration in the consciousness of its inhabitants. In a magazine interview,[63] Abramson explained that there are about 100 principles that make up Vedic Architecture that were utilized in the Tower Oaks project. These include the following: east-facing front entrance; placement of the building with reference to features of the land and water; proportions; and symmetry around center

---

[63]Anuradha Kher, "MHN Interview with Jeffrey S. Abramson: Vedic Architecture changes way people feel, Work," *Multi-Housing News Online* (May 5, 2010), http://www.multihousingnews.com/news/mhn-interview-with-jeffrey-s-abramson-vedic-architecture-can-change-the-way-people-feel-and-work-2/1004020377.html, accessed October, 2015.

point or nucleus of building. According to Abramson, the combined effect of these aspects of Vedic Architecture "connects individual life with cosmic life using the same intelligence that governs nature."[64]

In his presentation at a conference on Integrating Spirituality and Organizational Leadership, Abramson brought up the practical benefits of this form of architecture:

> On the practical side of things, because employees are the largest cost of operating any business, broadening the notion in my industry of a deeper of a more fundamental commitment to sustainability – raising people's quality of life – makes good business sense. We needed to go beyond just building green… If we are building anyway, why not incorporate these principles? It is critical that we enliven consciousness in our work environments to awaken health and happiness which gives a platform for a successful workforce.[65]

The Harvard case discussed business issues regarding the development of 2000 Tower Oaks . The incorporation of Vedic design added about 2–3 % more to the building cost. Potential benefits of working in this building improve occupant health and greater mental clarity and imagination, leading to enhanced individual and company performance. A healthier building reduces sick time and increases worker retention. Previous literature, such as a study by the Rocky Mountain Institute with the Environmental Protection Agency, has reported that green buildings can contribute more to financial results by improving the productivity of human capital than by eliminating all utility costs.[66] 2000 Tower Oaks may provide a special opportunity to research the extent to which a building can enhance human capital. Such research can give renters data to consider in deciding whether to pay a rent premium for the benefits which are claimed for an architectural approach which encompasses LEED® green building practices, Vedic design, and EnergyStar components.

---

[64]Jeffrey Abramson, quoted in "MHN Interview with Jeffrey S. Abramson: Vedic Architecture changes way people feel, Work." For a fuller discussion about the concept that Vedic buildings align inhabitants with cosmic or natural law please see Jonathan Lipman, "Introduction to Maharishi Vastu Architecture," http://www.vastutv.com/introduction-to-maharishi-vastu-architecture/, accessed October, 2015.

[65]Jeffrey Abramson, "Vedic Architecture—Where buildings inspire and enrich lives of occupants," PowerPoint presentation, September 13, 2015, 5th International Conference of ISOL Foundation, Chicago, IL.

[66]Joseph Romm and William Browning, *Greening the building and the bottom line: Increasing productivity through energy efficient design* (Snowmass, CO: Rocky Mountain Institute, 1998).

Directions for Further Research

The ideas in this chapter lead to some propositions for practical research. Environmental leadership appears to be associated with postconventional development. Prior research[67] has found that TM practice leads to developmental advances, including an exceptional proportion of subjects at postconventional levels. Other research has associated TM practice with more integrated decisions[68] and more holistic values in executives.[69] These prior studies suggest the potential of the TM technique to influence thinking and behavior which favors sustainability. New research can investigate this directly by assessing the effects of TM on consciousness development, systems thinking, and sustainability performance of individuals and organizations. We predict that the application of TM and other technologies of Vedic Science would lead to business performance which will minimize environmental destruction, minimize pollution and waste, and promote justice and lead to a general enhancement of life in the direction of flourishing.

The office building at 2000 Tower Oaks Boulevard presents an opportunity to conduct new research concerning the effects of architecture on people, in a unique office building which incorporates an integrated Maharishi Vedic Architecture approach. We are undertaking qualitative research to understand the lived experience of workers in this building—do workers report differences in their health, happiness, and achievements, compared to their experience in other buildings? In addition, research on Sthapātya Veda can explore:

• Can we determine whether the decisions of those working in such a building are more favorable for sustainability-as-flourishing?

---

[67]Orme-Johnson, "An overview of Charles Alexander's contribution to psychology."

[68]Schmidt-Wilk, "Consciousness-based management development."

[69]Herriott, et al., "Spiritual dimensions of entrepreneurship."

- Are there measurable differences in employee retention, absenteeism, and in individual and company work performance that may be related to the building setting?
- Can the financial value of such effects be estimated to support a cost–benefit decision for renting in a Maharishi Sthapātya Veda building?

Summary

In their book *Flourishing Enterprise*, Laszlo et al. describe a shift from thinking about sustainability as reducing negative harm, to being inspired to create positive well-being. They discuss how practices to cultivate spirituality, defined as consciousness of connectedness, can help businesses thrive in service of a sustainable and flourishing world.[70] In this chapter, we have expanding on the significance of consciousness development for sustainability-as-flourishing and have presented a system of theory, practice, and evidence regarding higher consciousness from the Vedic psychology of Maharishi Mahesh Yogi.

Developmental psychology describes how the human mind has different patterns for structuring meaning at different stages of development. This chapter has presented a perspective that the limited range of consciousness development which is typical of adults today inevitably leads to the serious sustainability challenges facing the world. Mental processing at this level of conscious development tends to perceive the known in terms of divided parts, which are separated from the knower. Functioning within such a state of consciousness, mankind is producing technologies which achieve some intended effects but also can produce unintended yet serious life-damaging side effects. This is the inevitable limitation of the kind of science and technology possible within that range of consciousness development. Development in the direction of higher states of consciousness is a necessary solution to realize the potential for human life to live in a prosperous and restorative relationship with the environment. In higher states, we are awake to that pure spirituality which is the holistic intelligence of nature which "sustains existence and promotes the evolution of everything."[71] This is enlightenment, defined as "the natural ability to think and act in accordance with natural law."[72]

Sustainability is a phenomenon of enlightenment, of wholeness. And wholeness is found not in the complex details of all the parts and their relationships, but very simply in the experience of the holistic creative intelligence available in one's own Transcendental Consciousness. This conception of the identity of our own Transcendental Consciousness with the wholeness of natural law is the traditional

---

[70]Chris Laszlo and Judy Sorum Brown with John R. Ehrenfeld, Mary Gorham, Ilma Barros Pose, Linda Robson, Roger Saillant, Dave Sherman, and Paul Werder, *Flourishing enterprise: The new spirit of business* (Stanford, CA: Stanford Business Books, 2014).

[71]Maharishi Mahesh Yogi, *Maharishi University of Management: Wholeness on the move*, 8.

[72]Maharishi Mahesh Yogi, *Maharishi Vedic University Introduction*, 113–115.

wisdom of the Vedic spiritual tradition, which has passed on practical tools to enhance our experience of our wholeness—and thus our own capacity for "sustainability-as-flourishing." In addition to the Transcendental Meditation program, these tools include Vedic Architecture, which is said to enhance the mental and physical well-being of building inhabitants.

TM can help develop an intuitive attunement with a greater whole, to align "the managing intelligence of the manager in alliance with this supreme managing intelligence of the universe," so that our performance becomes as "ever evolutionary as the administration of the universe through Natural Law."[73] Research has shown evidence of wide-ranging effects of this technique for the mind, body, and community—in the direction of health and wholeness. Further research is suggested concerning the implications of TM and Maharishi Sthapātya Veda for thinking and behavior which advances sustainability.

While we see enormous sustainability challenges in these times, tools for transforming consciousness are available for us to realize growing values of balance, harmony, and fulfillment in the individual, society, and environment.

Chapter Discussion Questions

1. Levels of Consciousness. The chapter argues the premise from Einstein that "We cannot solve the problems that come with the world we have made thus far from the same level of consciousness at which we created them." Summarize how this point of view is argued in this chapter. In your answer explain:

    1.1. Why does limited consciousness development create problems for sustainability?
    1.2. How do characteristics of higher states of consciousness lead to flourishing?

2. Vedic technologies. The chapter discusses two of the Vedic technologies which are said to align managers with the intelligence of nature:

    2.1. What are some of the features of the Vedic approach to architecture?
    2.2. Explain how some of the research results regarding Transcendental Meditation might have implications for sustainability.

3. If organizations could be managed as nature manages, what results would that have for sustainability?

---

[73]Maharishi Mahesh Yogi, *Maharishi University of Management: Wholeness on the move*, 8.

Formless Meditation and Sustainability

9

Michael Carroll

Abstract

This chapter is about rediscovering our original prosperity by fostering a vision of sustainability through mindfulness-awareness meditation. It garners the view how *simply sitting still* fosters natural social intelligence skills required for building a sustainable future. Developing sustainable solutions for many of today's global problems demands innovative thinking, a strategic long-term view, sophisticated social intelligence, and much more. But core to shaping a sustainable future is first respecting the profound natural world that surrounds us right here, now, today. In this chapter, we will explore how the ancient tradition of mindfulness-awareness meditation is fostering just such an appreciation in communities throughout the world—giving rise to a fresh "spiritual" perspective on what it means to thrive, flourish, and "be prosperous" in the emerging twenty-first century.

Introduction

When we think of "sustainability," what commonly comes to mind are topics such as developing products and services that support rather than harm our environment; preserving our natural resources; cleaning rather than polluting our world, and much more. For the most part, our twenty-first century nomenclature of "sustainability" is often about fostering a healthy collective relationship with our

---

Adapted from Michael Carroll, *Fearless at Work* (Boulder, CO: Shambhala Publications, 2012).

M. Carroll (✉)
AAW Associates, 207 Engle Drive, Wallingford, PA 19086, USA
e-mail: jhampa@comcast.net

phenomenal world—an admirable effort full of many new, unforeseen, and "wicked"[1] challenges indeed.

But in order to foster this healthy relationship with our world, we first need to have a healthy relationship with ourselves—where people from diverse cultures can resolve conflict intelligently while building the social networks needed for living sustainable lifestyles. Needless to say, there are many business, scientific, and philanthropic enterprises working to foster these social relationships so vital to sustainability: from small community-based microenterprises to bio-chemical giants such as BASF and from enterprises such as Doctors without Borders to Bono's (RED).

Yet, promoting these healthy social relationships is forever fraught with infinite human complexities that can make our best efforts for naught. Whether it is individual trauma or fixed social convention, language barriers or simple human mistrust—building healthy social relationships requires individuals committed to stepping beyond personal barriers, preferences, and conventions to engage others in a shared and sustainable "social vision."

In this chapter, we will explore how the simple act of sitting still for extended periods of time—commonly referred to as *formless* or *mindfulness-awareness meditation*—can offer individuals a tool for stepping past many of the personal barriers that often frustrate the social innovation required for building a sustainable future. We will explore how formless meditation can help cultivate natural social intelligence skills—specifically the eight core social intelligence competencies researched by Daniel Goleman in his groundbreaking book: "*Social Intelligence: The Revolutionary New Science of Human Relationships.*"[2]

Formless Meditation

First, let us explore exactly what we mean by "Formless meditation." Commonly referred to as mindfulness-awareness—formless meditation is a practice of sitting still for extended periods of time and training the mind to become unmistakably familiar with exactly what is occurring. Unlike form-based meditations such as visualization, mantra recitation, and pranayama, *formless* meditation relies on little or no technique nor does it seek to achieve any outcome. Referred to as *shikantaza* or "just sitting" in Japanese Zen, *Jing zuo* or "quiet sitting" in Confucianism, *Zuowang* or "Sitting in forgetfulness" in the Taoist tradition, and *Lhatong* or "clear seeing" in the *Mahamudra* and *Dzogchen* Tibetan traditions, *formless* meditation is about recognizing rather than achieving, expressing rather than developing, and

---

[1]Ivor Hopkins and Bengt Skarstam "*Sustainability: It is personal*"—*The Link* 2015 page 41. Retrieved September 1, 2015: http://www.reshape.se/files/9814/0932/4526/SUSTAINABILITY_it_is_personal.pdf.

[2]Daniel Goleman, *Social Intelligence: The Revolutionary New Science of Human Relationships* (New York: Bantam Books, 2006).

being authentically who we are rather than trying to become a better version of ourselves.

When we practice formless meditation, we learn to tame our restless minds, recognize an inherent wisdom we had been overlooking, open gently and skillfully toward others and ultimately live a fully realized life. Such a discipline is a lifelong practice requiring skill, perseverance, and humor, and generally speaking, the practice unfolds along four broad guidelines:

Motivation: *Fearlessly opening to whatever occurs*
Mindfulness: *Vigorously training attention*
Awareness: *Becoming familiar with primordial presence*
Relaxing: *Resting thoroughly.*

Motivation: Fearlessly Opening to Whatever Occurs

Science has been documenting many of the benefits to practicing formless meditation. For example, with only short amounts of practice, we can grow the part of the brain that regulates our emotions,[3] or with sustained practice over months, we can significantly revitalize our immune system.[4] Or with a daily practice, we can gradually improve our emotional intelligence and sense of well-being.[5] And over the centuries, accomplished practitioners of formless meditation speak of many intriguing paranormal benefits such as clairvoyance, mastery over the elements, and divination. And while these benefits are inspiring, no doubt, engaging the practice properly requires that we eventually drop our desire to achieve any benefit whatsoever and instead resolve ourselves to perfecting a very simple yet demanding gesture: *fearlessly opening to whatever occurs.*

Such an undertaking seems straightforward enough but opening to whatever occurs becomes increasing subtle and demanding as we practice more and more. At first, we quite reasonably may come to meditation motivated to relieve our personal suffering or confusion. Or maybe we have read about becoming wise, joyful, and healthy through meditation and would like to become such a person. Over time, however, practicing formless meditation reveals that accomplishing such ambition is questionable and we notice that practicing teaches us to *discover* rather than achieve—*recognize* rather than accomplish.

---

[3]Yi Yuan Tang, "Integrative Body Mind Training (IBMT) meditation found to boost brain connectivity," *Science Daily* August 18, 2010.

[4]Davidson et al., "Alterations in Brain and Immune Function Produced by Mindfulness Meditation," *Psychosomatic Medicine,* 2003, 65:564–570.

[5]Kirk Warren Brown and Richard M Ryan, "The benefits of being present: Mindfulness and its role in psychological well-being," *Journal of Personality and Social Psychology*, Vol. 84(4), Apr 2003, 822–848.

Shedding our motivation to achieve takes time and humility where we slowly soften to ourselves and to those around us. Rather than aspiring to become someone else—someone who is less confused and a healthier version of "me"—we, instead, slow down, ease up, and begin to notice who we are—which demands that we *open*—making ourselves utterly available to anything and everything that occurs. Whether we are sitting on a meditation cushion or parking a truck, studying a rare wisdom text or sewing up a wound, our motivation becomes to *fearlessly open to whatever occurs.*

Traditionally such openness—such willingness to be entirely available to our world without any preconditions—is considered the core gesture of compassion which not only becomes our motivation for practicing formless meditation but more importantly how we increasingly recognize who we are and how we build healthy social relationships and a sustainable world.

It is vital, therefore, that our motives for practicing formless meditation permit us to engage our social relationships authentically and traditionally the motivation we are encouraged to cultivate is compassion—a willingness *to fearlessly open to whatever occurs.*

Mindfulness: Vigorously Training the Attention

In some sense, the mindfulness aspect of formless meditation is an artificial exercise where we sit still for long periods of time in order to sustain our attention on an object. Essentially, mindfulness is about remembering to bring our attention back to whatever is occurring. It is kind of like going to the gym to work out rather than just naturally swimming in the ocean or walking a mountain. We very deliberately work out: noticing where our attention is, intentionally escorting it to an object and working to sustain our attention on that object. Such training can be very monotonous and exquisitely demanding requiring alertness, vigilance, and precision.

In formless meditation, sustained attention is not so much a goal of the practice, but more how we naturally recognize that we can stop rehearsing our lives and instead live them directly in the immediate moment. Such sustained attention, while a natural expression of the formless meditation discipline, is not, however, sufficient for engendering healthy social relationships and for living a fully realized, sustainable life.

For many of us, when we come to meditation, we would like to calm our minds—and, typically, we struggle trying to make our busy minds behave themselves. Using the mindfulness technique, we recognize where our attention is, notice our thoughts, and bring our attention to our breath or an object. When we vigorously train our attention in this way, an ironic shift eventually occurs. Rather than seeking calmness in the busy display of our mind, we notice that our mind is already naturally calm in *how we notice* the display. We shift from trying to make our minds behave themselves to abiding calmly *as a mind* that is noticing itself.

Such a discovery shifts the practice and over time our attention stabilizes and we become one pointed—calm, clear, and attentive to whatever arises. Mindfully abiding in this way, we open further to our world and others and become sharply curious about our circumstances.

Awareness: Becoming Familiar with Primordial Presence

Typically, we experience our lives in general as what is traditionally called a *dualistic situation*—"*me over here*" encountering "*that over there*"—which is natural enough. There is a lot of stuff "*over there*" that we need to attend to—picnic tables and sharp knives, hurricanes, and fast traffic that all need our attention. But in formless meditation, we realize that such a dualistic perspective is a narrow window that, while giving the impression as complete and accurate, is, in reality, a confined and partial view of a much larger and accessible perspective—a *primordial presence*. Recognizing this larger presence is awareness and we do this in the practice in three ways:

- Synchronizing
- Analyzing
- Glimpsing

Synchronizing—Through mindfulness, we eventually notice that our mind, body, and world are not unfolding as three separate and seemingly uncoordinated aspects of life—*our dualistic situation*—but we recognize that we are intimately woven together—our mind, body, and world—as a primary immediacy—an undifferentiated physical nowness that we experience in the meditation and in everyday life as our synchronized presence.

Analyzing—The more familiar we become with being a synchronized presence in nowness, the more we become curious about what exactly is going on here. For example, it is not unusual for practitioners to seek answers to the following questions: "*Where is this 'mind' that I am trying to observe in meditation?*" "*What is a 'thought' and where does it come from?*" "*Since I can only experience 'now', where is the past and why is the present ungraspable?*" Traditionally, shaping and training the mind's natural curiosity as it seeks to investigate its synchronized presence is of the utmost importance and the Kagyu Mahamudra tradition offers many excellent instructions for examining this non-dual nature of mind.[6]

Traditionally, engaging Mahamudra instruction is done only under the guidance of a qualified teacher who is capable of giving what is called "direct pointing out instruction." Such instruction is vital because "direct pointing out" is how the practitioner unmistakably and clearly recognizes what is, in fact, going on here: *our*

---

[6]See: Traleg Kyabgon, *Mind at Ease* (Boulder, CO: Shambhala, 2004); and Dakpo Tashi Namgyal Rinpoche, *Clarifying the Natural State: A Principal Guidance Manual for Mahamudra*, (Rangjung Yeshe Publications, 2004).

synchronized presence is unbiased, timeless and vast—a primordially pure state of mind—and we have ready access to this primordial presence because, despite our seeming confusion, it is exactly how we have been experiencing our lives all along.

Glimpsing—By mingling our *calm abiding* with our primordial synchronized presence, our meditation shifts further from the artificial checking of attention to *just being primordially present*. Practicing in this way is subtle and demanding where we become more and more familiar with being fearlessly awake as primordial presence rather than striving to do so. We may struggle to extend our experience of wakefulness or try to recall how best to enliven the experience, but such strategies prove useless and we discover that becoming familiar with primordial presence is about *glimpsing*. Whether during brief moments or extended episodes; by surprise, or through deliberate technique, the practice of formless meditation teaches us how to recognize this sudden and vivid arising of our natural state of mind and over time we *become familiar with our primordial presence*.

Relaxing: Resting Thoroughly

The more familiar we become with calmly abiding as a primordial presence, the more confidently we live free of the mistaken complexities of being afraid of our lives. Rather than picking and choosing our experiences, trying to horde life's pleasures and ward off life's difficulties, we instead discover that we can taste all life's encounters deeply and thoroughly—with a full and vigorous presence. Here, our meditation shifts even further from synchronizing, analyzing, and glimpsing to *relaxing*. Such relaxing is not about sitting by the pool and reading a comic book, though this is not excluded, of course. Rather, relaxing, in this case, is how we confidently express our primordial presence and live a fearless, realized, and sustainable life. Traditionally, it is highly recommended that we practice in extended solitary retreats under the guidance of a realized teacher in order to fully appreciate this discipline of *relaxing* and *resting thoroughly*.

Finally, at some point in the practice of formless meditation, circumstances definitively shift, where we discover that we are effortlessly and irreversibly awake. Many inspiring stories of Buddhist masters recount this shift: Tilopa slapping Naropa with his sandal[7]; Bankei observing his spittle while lying on death's bed[8]; Kasyapa smiling during Shakyamuni's flower sermon. And for those who practice formless meditation with great effort and devotion, such a shift occurs as a profound irony—as if we had mistakenly been living our lives backwards—walking in reverse, observing our world as it recedes. And suddenly, we discover, almost by chance, that we were perfectly designed to live our lives moving forward—facing ahead as we walk, going toward our experience rather than away. And we simply wake up to a natural rhythm that we possessed all along but had misunderstood and overlooked. Like rediscovering how to walk, finally, we wake up unmistakably and

---

[7]Herbert Guenther, *The Life and Teaching of Naropa* (London: Oxford University Press, 1963).
[8]Peter Haskel, *Bankei Zen* (New York: Grove Press, 1984).

irreversibly—fearlessly at our ease—and at this stage of meditation, there is really nothing to do but *rest thoroughly* and walk forward.

> ### Case Study: When Stress Goes Toxic[9]
>
> *Meet Kevin, the EVP of sales and marketing for a $4B global medical device enterprise, who just completed the merger of two sales forces due to a recent strategic acquisition and is leading his new global team through the launch of a vital and highly sophisticated surgical device in Asia and Europe. The sudden arrival of new leaders, managers and consultants is fostering a shared confusion throughout the organization and Kevin and his team are being challenged to build team spirit, streamline communications and per- form in a difficult and at times disorienting setting.*
>
> *To add to the pressure, Glenn, the CFO, has implemented a new revenue tracking system that not only sets and tracks monthly sales but also sets sales goals that are 8–11 % above what any manager feels are achievable in the short term.*
>
> *Given the circumstances, it hasn't taken long for the pressure and stress to take its toll on the sales organization's performance and on Kevin personally. Arguments among sales managers are becoming routine, the CFO's financial staff is becoming sullen and perfunctory and turnover among sales reps is climbing. And the company is missing its sales targets—by a lot!*
>
> *At one point, one of Kevin's regional managers breaks down in tears after a 12 h planning session, lamenting openly: "I didn't sign up for this—to be treated like a slave by some bean counters insisting that my job is to 'simply make the number'. We know how to sell this stuff….if they would just let us do our jobs! And to make matters worse the patients who really need our surgery devices aren't getting the help…This job has become toxic and I think I've come to the end of my journey here…."*
>
> *Kevin knew right then and there that he and his team had hit a crossroads. His team "knew how to sell this stuff" but maybe not on the same time table as corporate would want. What was he to do?*

> ### Discussion Questions
>
> 1. What is getting in the way of this enterprise bringing medical assistance to patients in need? Is it just the pressure of "making the number" or is it "toxicity"?

---

[9]Adapted from Michael Carroll, *Fearless at Work* (Boulder, CO: Shambhala, 2012).

2. What is the leadership challenge in working with confusion and disori-
   entation in the workplace? Does 'disorientation' distort conflicts and
   difficulties and how?
3. How can socially intelligent behavior help redirect this 'toxic' situation?

Case Resolution

As a socially intelligent leader, Kevin felt responsible for the emotional health
and well-being of his people and while he did his best to manage the pres-
sures from the "*bean counters*" more needed to be done. Many sales reps and
consultants were demanding that "…*you need to put your foot down here
Kevin and say enough is enough*…." But Kevin knew a more nuanced hand
was required. Skillful influencing was needed not more aggression; genuine
concern for all including the "*bean counters*" was required not more "*us
versus them*"; and accurately listening to the pressures fostering the "*toxicity*"
was needed not just reacting.

After several confidential conversations with Craig, the Chief Medical
Officer and Ellen, SVP of global project management listening to their views
and insights, Kevin reached out to the CEO, Patricia with a novel invitation:

> Patricia as you know right now we are not meeting our goals and the merger
> continues to plague us with all kinds of difficulties. But I am confident that we have
> a path forward but it will require that we all listen to one another. I'd like to propose
> a small meeting – you and I in a room with George, Craig, Ellen and a few of my
> VPs just to listen to one another…something informal – no power points, no pre-
> sentations, just 8 of us in the room. No matter what the outcome, I know that we will
> better understand each other and right now that seems to be the missing ingredient
> for success. What do you think?

Kevin and Patricia went on to have the meeting, which required all in
attendance to demonstrate the very maturity, patience, and attunement lacking
in the day-to-day management of the business. Tensions were high and
conflicts were aired, but in the end due to Kevin's willingness to address the
underlying toxicity head on, a course forward was mapped out.

Pressures to meet sales goals remained, of course, but new approaches to
meet those goals were listened to and included. The CEO and CFO expressed
a renewed interest in understanding the daily challenges to perform, "*simply
making the number*" was no longer used as a weapon and, with a lot of
renewed socially intelligent work on everyone's part, the cloud of toxicity
lifted and the merger ultimately succeeded.

How Formless Meditation Fosters a Sustainable World Through Natural Social Intelligence Skills

As we deepen our practice of formless meditation, we begin to master our experience of everyday life. Such mastery is more than just making our world behave itself, however. We may think, at times, that successfully paying the bills, collecting possessions, securing life's pleasures, or protecting prized accomplishments is suitable, but we soon discover that life demands more—that we must live life skillfully—properly shaping the larger stage of human relationships that support our efforts at living a decent, sustainable life. And when such relationships are not properly attended to, they can grow toxic and dysfunctional, frustrating our best efforts.

Mastering a sustainable life requires a broader intelligence where we not only behave with dignity but inspire it in others; where we not only make a living, but also help others succeed as well; where we not only surround ourselves with preferred experiences, but treat all aspects of life—good, bad, happy, and sad—as sacred and profound. Mastering our lives in this way is about demonstrating our conventional wisdom while skillfully cultivating the healthy human relationships that make a sustainable life possible.

In his bestselling book "*Social Intelligence: The revolutionary new science of human relationships,*"[9] Daniel Goleman maps out eight skills for cultivating the healthy human relationships that are vital to creating a sustainable life. And, not surprisingly, his study finds that we are built to skillfully work with one another— that our "…*brain demands that we be wise*…." in shaping and being shaped by each other's emotions and biology—that we are "*hardwired*" to instinctively harmonize with one another.

But such instincts can grow weak and fallow if we take them for granted. In particular, if we permit the numbing effect of anxiety, aggression, and fear to dull our social intelligence, we can find ourselves frustrated with life rather than mastering it. And one way to strengthen our natural ability to form healthy human relationships is through the practice of formless meditation.

At first glance, the proposition that formless meditation can foster social intelligence and a sustainable world may appear absurd: *By sitting still for extended periods of time we can become more socially intelligent and promote a sustainable way of life.* But, despite the seeming counterintuitive disconnect, this is one of the many exquisite ironies of practicing formless meditation and below is an outline detailing how such a simple act can help foster the eight social intelligence competencies critical for building a sustainable world.

Primal Empathy

Goleman's definition—feeling with others; sensing nonverbal emotional cues[10]

> …The ready ability to sense the emotions of another. A low-road capacity, (neuro-circuitry that operates beneath our awareness,) this variety of empathy occurs – or fails to – rapidly and automatically…[11]

How formless meditation helps foster this capacity:
One of the outcomes of practicing formless meditation over many years is a decided shift from "mentally" tracking our experience as a "removed presence"—which can distance us from our spontaneity through commenting on, rehearsing, or worrying about scenarios—to being in prolonged, direct somatic contact with the present moment. Such awareness where we are "synchronized" with our experience versus "removed" from it permits spontaneous access to our somatic expressions. As a heightened form of curiosity that is in direct contact with the world and our neighbors, this natural empathy gives rise to a strengthened appreciation of others' needs, concerns, and foibles. Such awareness unfolds differently for each practitioner—sometimes marked by initial awkwardness, forced "noticing," or wildness that steadily gives rise to a confident awareness of unspoken somatic and social cues.

Attunement

Goleman's definition—listening with full receptivity; attuning to a person[12]

> …attention that goes beyond momentary empathy to a full, sustained presence that facilitates rapport. We offer a person our total attention and listen fully. We seek to understand the other person rather than just making our own point.[13]

How formless meditation helps foster this capacity:
Typically, we listen to others through the filter of a "mindset." If we are looking for a business deal or a romantic relationship, we listen for social cues that will guide us to determine the likelihood of making a deal or striking up a rewarding connection. While relying on "mindsets" in order to discern is not a problem, being *unaware* of doing so is. By practicing formless meditation, we learn to recognize how "mindsets" influence and at times distort our outlook, agilely drop the "mindsets" when necessary and in turn bring our unbiased attention to the immediate moment.

---

[10]Daniel Goleman, *Social Intelligence: The Revolutionary New Science of Human Relationships* (New York: Bantam Books, 2006), 84.

[11]Ibid., 85.

[12]Ibid., 84.

[13]Ibid., 86.

Such attention is not merely a "noting" or "observing," however, but a highly sensitive openness, requiring confidence in being fully exposed to the rawness and "sacredness" of the phenomenal world. This attunement that unfolds from formless meditation is broader than Goleman's "…*offering a person our total attention and listening fully*…." since through the formless meditation practice we open to a conversation with the entire phenomenal world attuning not just to the social cues but to the play of an organic intelligence beyond animate and inanimate that is a primary source of insight for shaping a sustainable way of life.

Empathic Accuracy

Goleman's definition—understanding another person's thoughts, feelings, and intentions[14]

> …builds on primal empathy but adds an explicit understanding of what someone else feels and thinks…bringing high-road circuitry (neuro-circuitry that operates more methodically and with deliberate effort) to the primal empathy of the low.[15]

How formless meditation helps foster this capacity:
Through formless meditation, we familiarize ourselves with our own intimacies: sitting silently for extended periods of time, we get to know ourselves up close and personal and gradually we stop feeling impoverished, harsh, or arrogant about our various unique features. Such intimate familiarity with ourselves unfolds as a "gentleness" that naturally probes and appreciates others' emotional presence and the phenomenal world around us. Traditionally, how such gentleness is expressed by formless meditation practitioners is referred to as the four immeasurables:

- Loving kindness—recognizing another's happiness and working to cultivate such happiness on their behalf.
- Compassion—recognizing another's suffering and working to relieve them of such suffering
- Sympathetic joy—recognizing and delighting in another's joy
- Equanimity—being equally curious toward all concerning their well-being

For practitioners of formless meditation, bringing the four immeasurables alive is the very foundation for promoting a sustainable way of life. How accurate formless meditation practitioners are when recognizing another's thoughts, feelings, or intentions is traditionally treated as a phenomenological issue versus a quantifiable event which can include such abilities as glimpsing clearly, directly introducing, softly touching, mutually opening, jointly knowing, and more.

---

[14]Ibid., 84.
[15]Ibid., 89.

Social Cognition

Goleman's definition—knowing how the social world works[16]

> …know what is expected in most any social situation…adept at semiotics, decoding social signals….[17]

How formless meditation helps foster this capacity:
Another outcome of practicing formless meditation for extended periods is that we free up our cognitive function from anxiously "keeping score" of our experience. Typically, we expend tremendous amounts of mental and emotional energy trying to determine whether we are being treated fairly by life—are we being insulted, cheated, disrespected? Are we being loved, recognized, appreciated? Such "emotional score carding" becomes increasingly pointless for practitioners as the practice frees up our natural curiosity that had been forced to play score keeper. Such curiosity, traditionally called "prajna" or *supreme direct knowing,* is highly attuned to whatever unfolds, taking a fresh, almost childlike interest in the unique contours of experience. Such direct knowing is the very intelligence that is vital to shaping a sustainable world since it discerns quite organically how to respect and care for the world.

Prajna is traditionally considered the wisdom with which the practitioner glimpses and ultimately rests with the primordially pure state of enlightenment, engaging all situations—social and otherwise—as a resilient spontaneous direct knowing.

Synchrony

Goleman's definition—interacting smoothly at the nonverbal level[18]

> …lets us glide gracefully through a nonverbal dance with another person….Getting in synch demands that we both read nonverbal cues instantaneously and act on them smoothly —without having to think about it….[19]

How formless meditation helps foster this capacity:
Another outcome of practicing formless meditation for extended periods of time is what is called "dancing with the phenomenal world." While such a phrase may sound a bit soft and self-indulgent, it, nonetheless, speaks to a broader sense of *Synchrony* where the practitioner recognizes the fluid, insubstantiality of experience and, rather than resisting, generously embraces life's flowing momentum. Such an ease of being unfolds into the practitioner's social setting and beyond. Whether it is the grief of losing a loved one or the passion of falling in love, the exquisite relief of

---

[16]Ibid., 84.

[17]Ibid., 89.

[18]Ibid., 84.

[19]Ibid., 91.

sitting by the ocean or the grueling muscle of climbing a ridge, formless meditation practitioners learn that "gliding gracefully" with the unspoken momentum of it all is how we confidently open to our experience and taste it completely on its terms.

Such *Synchrony*, once again, puts the practitioner of formless meditation into direct contact with one's phenomenal experience naturally introducing how to live respectfully and learn sustainable behaviors.

Self-presentation

Goleman's definition—presenting oneself effectively[20]

> …The ability to 'control and mask' the expression of emotions is sometimes considered key to self-presentation. People adept in such control are self-confident in just about any social situation, possessed of savoir faire…[21]

How formless meditation helps foster this capacity:
Formless meditation practitioners place a primary emphasis on learning *how to be* over learning *what to do*. We may want to become a fantastic portrait painter or a brilliant CEO; to play the violin or run a marathon, but for formless meditation practitioners, we first must resolve a fundamental issue: *Can we be at ease with who we are under all circumstances?* Resolving such a core issue is not a matter of cheerleading our way through life's difficulties or keeping a stiff upper lip as we face life's many unknowns. For formless meditation practitioners, answering such a question is the visceral essence of the practice where we unmistakably reconnect with an inherent confidence that affirms that we are completely capable to *be* on this planet. Such confidence unfolds into social situations as poise that is not so much "controlled" as it is relaxed; not "masking" emotions but agilely expressing them. Furthermore, such confidence unfolds in relationship to the phenomenal world as an unshakeable respect for the sacredness of life.

Influence

Goleman's definition—shaping the outcomes of social interactions[22]

> …expressing ourselves in a way that produces a desired social effect like putting someone at ease. Artfully expressive people are viewed by others as confident and likable and in general make favorable impressions…[23]

---

[20]Ibid., 84.

[21]Ibid., 94.

[22]Ibid., 84.

[23]Ibid., 95.

How formless meditation helps foster this capacity:
Another outcome from practicing formless meditation over extended periods is the development of what is traditionally called Upaya or skillful means. Essentially, skillful means is caring for what needs care; accommodating what needs accommodating; discarding what needs to be discarded. In short, Upaya is doing whatever is needed to bring about wakefulness and well-being for oneself and others. Such skillfulness in shaping relationships and outcomes springs directly from the wisdom of "prajna" or *supreme direct knowing* where we see clearly the other person without any filters or mindsets.

Typically, because we see other people and our world through our "mindsets" rather than directly for what the world is and for who people actually are, we undercut our attempts at influencing or lending a hand because we end up influencing imaginary people and "projected realities" rather than the actual people themselves and reality itself. But after prolonged formless meditation practice, we increasingly drop this tendency to relate to imaginary people and things and instead *see the other clearly* with no filters. Such exposure can be disturbing for those involved since such interactions are based on vulnerability requiring courage and humility. Yet such exposure is fundamental to understanding our world and how to build a sustainable way of life.

In the end, the skillful means, Upaya, developed out of formless meditation is an emotional agility that shapes human exchanges as they fluidly unfold in order to promote health, sustainability, and well-being.

Concern

Goleman's definition—caring about others' needs and acting accordingly[24]

> …propels us to take responsibility for what needs doing translates into good organizational citizenship. Concerned people are those most willing to take the time and make the effort to help out a colleague….[25]

How formless meditation helps foster this capacity:
It does not take long for formless meditation practitioners to discover that being human is to be tender. Sitting alone on a cushion for extended periods readily reveals this simple, ordinary, human softness. Too often, we can find ourselves covering up our tenderness, however, by putting on a botoxed face, curling up in a ball, or lashing out in anger when touched by life. When we practice formless meditation, we find such a struggle as self-defeating and instead recognize that our tenderness is, in fact, human wisdom that inclines to be expressed. Such tenderness moves us to care for ourselves, others, and our world—to show genuine concern— and we discover that our tender vulnerability is powerful—that as humans we are built to be decent, kind, and helpful to others.

---

[24]Ibid., 84.
[25]Ibid., 96.

Conclusion

As formless meditation becomes increasingly popular and science seeks to catalog its many benefits, it will be equally important to examine closely the *actual experience* of those who choose to make the practice a lifelong discipline. For it is here—in the intimate human experience of training the mind through formless meditation—that we can discover what it means to be a fully realized, social intelligent human being who respects life's sacredness and promotes a sustainable way of life.

Chapter End Reflections

1. Explain how formless meditation triggers emotional agility that shapes human exchanges and promotes health, sustainability, and well-being.
2. Do you believe that solutions for many of today's global problems demand innovative thinking and sophisticated social intelligence?
3. How can *simply sitting still* foster natural social intelligence skills that are required for building a sustainable future?
4. What shift would you make in your daily conduct as a skillful means based on formless meditation to reduce toxicity at workplace?

Spirituality, Sustainability and Happiness: A Quantum-Neuroscientific Perspective

<div style="text-align:right">

10

</div>

Rohana Ulluwishewa

Spirit literally means that which gives life to a system, and spirituality is the state of being one with spirit. In terms of quantum physics, spirit is prime energy, which is conscious, aware and intelligent. It fills the universe. In spite of its vastness, it is one— a single indivisible field of energy. The one manifests itself as many in material forms, creating the material world. If many forms were to sustain themselves, each of them must behave not as a self-centred individual, but as an integral part of the one. They can behave so, if they are in the state of one with spirit or are spiritual. Recent discoveries in neuroscience reveal human beings are endowed with the capacity to be one with spirit and to become who we really are. Once we become one with spirit, its oneness expresses itself through us as an inner urge to serve others. This is love. This study, with the help of scientific evidence, demonstrates how spirituality could bring not only sustainability, but also happiness, to the world.

Introduction

Unsustainability of our economies, societies and environment, as well as the failure of growing material wealth to deliver happiness to humanity, is now widely evident. Many scholars have provided explanations for the rampant unsustainability and unhappiness and have proposed a variety of mitigating strategies. They have treated these two issues separately. To mitigate unsustainability, some have emphasised institutional and political reforms, and others have highlighted the value of technological solutions. Unhappiness has been studied by both psychologists and economists, and such studies have proposed psychological and economic remedies. Most remedies proposed to mitigate unsustainability and unhappiness aim at

R. Ulluwishewa (✉)
(Former) Massey University, Palmerston North, New Zealand
e-mail: ulluwishewa@xtra.co.nz

external changes—technological, institutional, societal, political and administrative. For instance, while a variety of measures to increase resource efficiency and to substitute non-renewable for renewable resources have been proposed to achieve sustainability, reforms aim at improving relationships, providing more leisure time, freedom and control over life, have been proposed to promote happiness.

However, there is an emerging tendency among academics, scientists and professionals to recognise the significance of inner changes. David Korten,[1] indicating the significance of inner changes, expressed his belief that the future of mankind 'may now depend on graduating to a coevolutionary perspective that brings together the spiritual and material aspects of our being in a synergistic union to create whole person, communities and societies' (p. 328). Similarly, David Reid,[2] concluding his book *Sustainable Development: An Introductory Guide* emphasised the significance of changing ourselves. John Ikerd Lonnie Gamble and Travis Cox[3] advocated 'Deep Sustainability' as an alternative. They moved beyond conventional strategies—improving resource efficiency and substituting non-renewable resources with renewable—to emphasising the significance of altering human relationships with each other and with nature. Ulluwishewa[4] in his *Spirituality and Sustainable Development* recognised self-centredness in our relationships with fellow human beings and with nature as the root cause of unsustainability and unhappiness and highlighted the significance of spirituality—inner transformation from self-centredness to selflessness—as the ultimate remedy. The present study, taking a step ahead, looks into recent discoveries in quantum physics, neuroscience, transpersonal psychology and scientific studies on consciousness and near-death experience in order to discover the ultimate root cause of unsustainability and unhappiness and possible remedial measures.

Spirit and Spirituality

Spirit literally means that which gives vitality or life to a system. All living beings, plant, animal and human, are biological systems. What gives life to us is spirit; it is the source of power which enables our body to move, eyes to see, ears to hear, nose to smell, tongue to taste, skin to feel and the brain to be conscious and to think. Once is withdrawn, the body becomes lifeless or is dead. Arguably, if spirit is the source of life, it must be deathless. It must be an entity within us which remains alive and conscious after our death; it must be an entity within us which was

---

[1]David Korten (1995) *When Corporations Rule the World* (West Hartford, San Francisco: Kumarian Press and Berrett-Koehler Publishers).

[2]David Reid (1995) *Sustainable Development: An Introductory Guide* (London: Earth scan Publishers Ltd.).

[3]John Ikerd (2014) Deep Sustainability https://sites.google.com/site/sustainabilitydeep/ date accessed 11 October 2015.

[4]Ulluwishewa (2014) *Spirituality and Sustainable Development* (Basingstoke: Palgrave Macmillan).

conscious before we were conceived in our mother's womb; it must also remains conscious when we are in deep sleep and unconscious. Is there such an entity within us? If so, what is it? To find the answer, one can look into one's body with the help of a powerful microscope. If one does so, one will first find cells, the basic building blocks of all living beings. But, we know cells are not deathless. Then, one has to look into cells in order to find whether there is anything deathless within cells. If one looks into a cell, one will first find molecules, which are also not deathless. If one goes further in, one will then discover atoms. Atoms are deathless but they are not the ultimate reality and one can go further in. If one goes further ahead and look into an atom, one will find subatomic or quantum objects—particles and waves—that are recognised by quantum physicists as energy. According to them, 99.99 % of the space within each atom is empty and this emptiness is occupied by energy. Energy is something which cannot be created or destroyed and therefore is eternal or deathless. Then, we can conclude that the energy which occupies the atoms of the body is what we call spirit, which gives life to us.

According to discoveries in quantum physics, the energy which occupies the empty space of the atoms of our body and gives life to us also fills the universe. There is not any point in the universe where the energy is not present. This universal energy is the prime energy which gives rise to all other energies, such as electricity, gas, petroleum and nuclear. The prime energy is conscious; it 'can think' and 'make choices'.[5] It is like a mind or a conscious being. Therefore, some call it 'The Universal Mind', 'The Being', 'The Universal Consciousness', and 'The Self'. This field of universal energy manifests itself in all beings as life, enabling all living beings to be conscious. Since it presents everywhere in the universe, the universal energy is omnipresent. Since it is omnipresent, conscious and has the capacity to know, it knows whatever happens anywhere in the universe. Hence, it is omniscient. All material forms we experience are its manifestations or its creations. In the process of creation, it forms atoms and then atoms get together to form molecules; the molecules form either the cells which in turn form all living beings, or the minerals which form the base elements of the physical environment. Hence, arguably, the massive field of conscious energy, or the universal consciousness, is able to create anything at its will. Therefore, it is omnipotent. In spite of its vastness and complexity, it maintains the balance in its creation accurately, demonstrating its extraordinary level of intelligence. In the whole galaxy, there is no entity other than itself; so it has no one to compete with, no one to be fearful of; it can create whatever it wants; therefore, it has no unfulfilled needs. Hence, it is contended and constantly at peace. In most religions, the Being is personalised and called God.

From the perspective of quantum physics, each one of us consists of two selves: (1) the energy or the energy-self which occupies the empty space in each atom of the physical body and (2) the matter-self or the physical body. Atoms represent the borderline between the two selves. While the energy-self exists below the level of

---

[5]Capra, F. (2010) *The Tao of Physics* (Boston: Shambhala). Duane Elgin (2015) We Live in a Living Universe. *Working With Oneness*, http://www.workingwithoneness.org/articles/we-live-living-universe. Date accessed 5 March 2015.

atoms—neutrons, protons and electrons, the matter-self exists above atoms—molecules, cells, tissues, organs and the body. The energy-self gives life to the matter-self. The energy-self is universal, it is one. My energy-self, your energy-self and the energy-selves of all others are interconnected; it is an indivisible field of energy. In terms of quantum physics, energy-self is more wave than particle. In it, there are neither time nor space. It is beyond the laws of physics; hence, it is immortal or eternal. This is our inner reality, the absolute truth about us, who we really are. On the other hand, the matter-self is more particle than wave and represents the physical body. Each matter-self is localised into the body and ends where the skin meets air. It is subject to the laws of physics and is impermanent and mortal. The energy-self is, as already explained, omnipresent, omnipotent and omniscient, whereas the matter-self is not. The energy-self, which is one, perceives all matter-selves as its own manifestations, as its own parts. Hence, the energy-self wishes all to be happy, healthy and peaceful. It is love. Its love is unconditional and unlimited. On the other hand, matter-selves perceive themselves as separate entities and each one perceives others as separate individuals—as 'others' and 'competitors'. When the matter-selves perceives others through senses, brain and the nerves system, they recognise some as the things and people they like and others as those dislike; they love the former and hate the latter. Hence, the love of the matter-selves is impure, limited and conditional.

Thus, within each one of us, there are two selves. We have a choice to identify ourselves either with the matter-self or with the energy-self. If we identify ourselves with the matter-self, we limit ourselves to our physical body. Then, our knowledge, intelligence, happiness, peace and capacity to love become limited. On the other hand, if we identify ourselves with the energy-self which fills the universe, we merge with the universe and gain access to its all attributes—unlimited knowledge, intelligence, peace, happiness and love. This is the state of being one with spirit, or spirituality. It involves a fundamental shift from identifying ourselves with matter-self to energy-self, or becoming who we really are. With this shift, we would cease perceiving ourselves as separate self-centred individuals and begin to perceive ourselves, others and nature as integral parts of the whole. This new perception would bring about a fundamental transformation in our relationships with others and nature. As will be explained later in this study, such a transformation in our relationships lays the foundation for sustainability and happiness.

Spirituality, Love and Sustainability

Energy-self is self-sustaining but matter-selves cannot be, because each one needs to fulfil a set of material needs, e.g. air to breath, food to eat and water to drink. No matter-self can produce everything it needs; each one is good at certain specific tasks. Hence, if all matter-selves are to sustain themselves, each one must act cooperatively, as evident in nature, in natural ecosystems. All matter-selves or the components of any natural ecosystem: (1) nutrients, solar energy, moisture and carbon dioxide as physical inputs; (2) green plants as primary producers;

(3) herbivorous animals as converters of plant material into food for carnivorous animals; and (4) finally micro-organisms, such as bacteria and fungi as decomposers, are designed to perform their roles. As long as each component performs its task, the ecosystem remains sustainable. All components of natural systems are designed in such a way that they have no choice but to act in service of others. For instance, green plants are designed to convert nutrients and moisture in soil, solar energy and carbon dioxide into food for herbivorous animals, and herbivorous animals are designed to convert plant matter into flesh for the consumption of carnivorous animals. They are not endowed with capacity to choose. Hence, natural systems are inherently sustainable.

Unlike plants and animals, we, human beings, are endowed with capacity to choose. Our life as human beings offers an enormous freedom of choice. At every moment in our waking life, we are in the process of making choices. We choose to identify ourselves either with the matter-self or with the energy-self. If we choose to identify with the energy-self, its oneness will express itself through us as love. Then, when our day-to-day life offers us choices, we tend to choose what brings well-being and happiness, not only to ourselves, but also to others. We will not want to meet our needs at the expense of the ability of others to meet their needs— needs of the present generation and of the generations to come. We will not seek happiness at the expense of happiness of others, of this generation and generations to come. We will not exploit our fellow human beings and nature for our advantage. If we were to change the external world, we would do so, not for our advantage but for the well-being of the whole. Thus, our relationships with our fellow human beings and with nature would lead to sustainability and happiness. On the other hand, if we choose to identify ourselves with the matter-self, as most of us do, when our day-to-day life offers us choices we will tend to choose what brings pleasure to us, what brings well-being to us and what brings pleasure and well-being to our 'loved-ones'. Most likely, we will seek pleasure even at the expense of others' pleasure and happiness. When we compete with others for available resources and opportunities, we will not mind doing all we can do to get what we want even at the expense of others' well-being and happiness. We will not mind using our power to change others and the environment for our advantage. Thus, our relationships with our fellow human beings and with nature lead to unsustainability and unhappiness.

Though most of us identify ourselves with the matter-self, recent discoveries in transpersonal psychology and neuroscience suggest that we are endowed with the capacity to identify ourselves with the energy-self and be spiritual. This evidence suggests our identification with matter-self and self-centredness is a sign of our spiritual underdevelopment. Abraham Maslow,[6] a transpersonal psychologist, in his theory of the hierarchy of needs, identified six needs in hierarchical order: (1) physiological needs, (2) safety needs, (3) love and belonging, (4) self-esteem and (5) self-actualisation. The highest need, self-actualisation, means becoming who we really are, or in other words, identifying ourselves with energy-self.

---

[6]Abraham Maslow (1987) *Motivation and Personality*, 3rd edition (New York: Harper and Row Publishers).

The view that we have the capacity to evolve spiritually is supported by recent findings in neuroscience. Until recently, most neuroscientists believed the brain produces consciousness. But now, it is widely accepted the brain does not produce it but the universal consciousness, or the energy-self, manifests itself through the brain. The brain acts like a TV set which receives signals from outside, transforms them into pictures and shows them on its screen. If this is the case, the brain should exhibit the key properties of the universal consciousness—oneness, pure and universal love. Donald Pfaff,[7] an American neuroscientist, in his book *The Neuroscience of Fair Play: Why We (Usually) Follow the Golden Rule*, says the human brain is hardwired to the oneness and to act according to the golden rule—one should treat others as one would like others to treat oneself—which is the corner stone of all great religions. In his recent book, *The Altruistic Brain: How We Are Naturally Good*, he demonstrates that human beings are 'wired' to behave altruistically and spontaneous kindness is our default behaviour. It has also been found that intelligence is hardwired in our brain in three forms[8]: (1) intellectual intelligence, or IQ, which enables us to think rationally, (2) emotional intelligence, or EQ, which enables us to harmonise our emotions with rational thinking, and (3) spiritual intelligence, or SQ which enables us to see the meaning and connection of random events. All these capacities appear to serve a certain purpose—to be one with spirit, or to become who we really are. These capacities are unique to human beings. Hence, it is sensible to argue that unlike other living beings on the planet, we are here to for a particular purpose—to become who we really are.

Though we have the potential to be one with spirit and possess all these extraordinary hardwired qualities, most of us do not exhibit these qualities in our ordinary lives. This is because, as discovered by neuroscientists, the hardwired brain is overridden by its soft-wired counterpart, which is an outcome of what neuroscientists call 'neuroplasticity' of the brain. Neuroplasticity implies the capacity of the brain to change itself in response to its experiences with the external world.[9] When we experience the external world through our senses, some neurons in certain regions of our brain become active, or 'fire' together. The neurons fire together, wire together and form neural circuits. Some such circuits dissolve quickly but others fire together more frequently become stronger and remain longer. We can remember such experiences even long afterwards. As our beliefs, perceptions and values change, so do the patterns of neural circuits. This is the process we call memory. As our beliefs, values, attitudes, perceptions, likes and dislikes change, so do the patterns of the neural networks—some old neural circuits disappear and new ones appear. Hence, we call it soft-wiring. The soft-wired qualities, mainly our 'likes' and 'dislikes', make us selfish and prevent us from following the hardwired universal love. Hence, our relationships continue to be self-centred and most

---

[7]Pfaff Donald (2007) *The neuroscience of FairPlay: Why We (usually) Follow the Golden Rule* (New York: Oxford University Press).

[8]http://sqi.co/the-neuroscience-of-spiritual-intelligence/. Date accessed 12 October 2015.

[9]Arden, John B. (2010) *Rewire Your Brain* (New Jersey: John Wiley).

human-made systems continue to be unsustainable. We witness this in most human-made systems—agricultural, industrial, economic, social and political.

Happiness, Pleasure and Sustainability

Happiness, from the spiritual perspective, is not a worldly feeling we experience through our senses, brain and the nervous system, but a property of the universal consciousness, or the energy-self. It remains deep within us in association with the energy, which fills the empty space in atoms. We experience it when we are in the state of one with it; when our mind is extraordinarily calm, quiet, pure, peaceful and tranquil, and when we act according to the hardwired brain. Some people experience it at near-death when they temporarily leave the body and merge with the universal consciousness. Studies on near-death experience reveal happiness, joy and peace as the most common emotions people experience in this state (Moody,[10]; van Lommel[11]). Anita Moorjani[12] described the joyful feelings she experienced in her near-death experience:

> I felt free, liberated, and magnificent! Every pain, ache, sadness, and sorrow gone. I was completely unencumbered, and I couldn't recall this way before—not ever (p. 5).

Jill Bolte Taylor,[13] a Harvard-trained brain scientist, experienced the same type of happiness when the left hemisphere of her brain was damaged, leaving her with only the right hemisphere. According to her, while the left hemisphere keeps us tied to the material world, the right hemisphere connects us to universal consciousness. Since the left is dominant in most of us, we can hardly connect ourselves to the universal consciousness. When her left brain was damaged, she was able to connect herself with universal consciousness and experience the happiness it radiates. She describes her feelings:

> If I had to choose one word to describe the feeling I feel at the core of my right mind [right hemisphere of her brain], I would have to say *joy*. My right mind is thrilled to be alive! I experience a feeling of awe when I consider that I am simultaneously capable of being at *one* with the universe, while having an individual identity (p. 181).

Unlike happiness, pleasure is a worldly phenomenon. As already mentioned, it is produced by certain types of neurons which emit special kinds of neurotransmitters that cause pleasurable feelings. In a way, this is an artificial means of causing 'happiness' by neurochemicals. It has been found there are certain spots in our brain where the pleasure-causing neurons are agglomerated. In neuroscience, such spots

---

[10]Moody, R.A. (1975) *Life After Life* (Covinton, GA Mockinbird Books).

[11]Lommel, P. van (2010) *Consciousness beyond Life: The Science of the near-Death Experience* (New York: Harper One).

[12]Moorjani, Anita (2012) *Dying To Be Me: my Journey from Cancer to Near-death, to Healing* (Hay House).

[13]Taylor, Jill Bolte (2006) *My Stroke of Insight: A brain Scientist's Personal Journey* (New York: Plume).

are called 'pleasure centres'. When a pleasurable action is undertaken, the neuron in the pleasure centres fire. Eating, drinking and having sex are some common actions which activate pleasure centres in both humans and animals. Some pleasurable activities unique to humans are acquiring wealth, position, power, reputation, prestige and influence.

When we are dependent on, or addicted to, a certain pleasure activity we do not care what harms it does to ourselves, others and the environment. We tend to undertake harmful, immoral and unethical activities for our pleasure. In response to such 'wrong' behaviours, 'wrong' perceptions are formed and are encoded on the brain in the form of neural circuits. Such 'wrong' perceptions are responsible for sending the 'wrong' signals to prompt 'wrong' actions and to reward pleasure for 'wrong' actions. Thus, when we get addicted to pleasure and seek pleasure at any cost, we make 'wrong' perceptions which guide neurons to prompt 'wrong' actions and to reward pleasure for 'wrong' actions. Thus, the real issue is not enjoying pleasure but becoming addicted to pleasurable experiences. Once we are, we do not mind hurting others, ignoring our duties, responsibilities and commitments, committing crimes, even harming ourselves. Furthermore, once we are attached to pleasure experiences, we find it extremely hard to live in the present moment. This is because pleasure centres are activated not only when we physically experience a pleasurable thing, but also when we think of past pleasurable experience, or of such an event to be experienced in the future. Whenever our mind is idle and finds the present moment boring, we tend to draw a pleasurable event from the past or future and ruminate on it. Once this becomes a habit, it prevents us from experiencing the joy of the present moment.

The soft-wired brain has been programmed by our wrong perceptions to see ourselves, not as integral parts of the whole, but as individuals separated from others and from the environment, and to perceive our fellow human beings as 'others'—competitors and enemies. The key factor the soft-wired brain cares about is *who and what can stimulate its pleasure centres*. Unless conscious efforts are made to control it, unless it is deliberately trained to do otherwise, or unless we act instantly without allowing it to distract us, the soft-wired brain is most likely to guide us to act selfishly. Its only concerns are to gain pleasure and to avoid pain. It prompts us to respond positively to a person or a situation if they are perceived to be capable of stimulating its pleasure centres. Otherwise, it prompts us to act negatively, no matter whether our action would bring suffering, pain, unhappiness or misery to others and the environment. Therefore, the pure love arising from within is expressed towards those who stimulate the pleasure centres as 'attached love' and towards those who stimulate pain as hatred. Thus, false perceptions soft-wired in our brain distort the hardwired pure unconditional love.

When we are driven by pleasure-seeking—likes and dislikes, we tend to perceive our fellow human beings and nature as potential pleasure objects. What is important for us is, not their well-being, but their capacity to activate pleasure centres in our brain and to generate material wealth and power. Such perceptions are likely to lead towards three kinds of relationships with others and nature:

1. If individuals, cultures, societies, economies and ecosystems we interact with have the capacity to activate pleasure centres within us, we would exploit them for our pleasure. We are likely to seek pleasure even the expense of their happiness and well-being.
2. If they lack the capacity to activate our pleasure centres, we want to change them in such a way that they could meet our pleasure needs. For instance, we would invest in educating and training such people in order to make them useful to us and in altering natural ecosystems to make them profitable. In such cases, our concern is our pleasure rather than the well-being of others and the ecosystems.
3. If they cannot be used to activate our pleasure centres at all, then we would label them as 'useless people' or 'useless ecosystems'. Then, we would want to either ignore them or destroy them.

Though we want to alter or eliminate certain economies, cultures, societies or ecosystems, if we do not have power to do so, our desires remain dormant. On the other hand, if we are powerful enough, we will (mis)use our power to do so. Powerful nations changed powerless nations, societies, cultures and ecosystems during the colonial period and are still doing so by different means, causing unsustainability and unhappiness. Thus, as long as we seek pleasure, our relationships with individuals, cultures, societies, economies and ecosystems are exploitative and lead to unsustainability and unhappiness.

Spirituality as the Source of Happiness and Sustainability

Evidence so far presented suggests the reality within all beings is energy; it is what we really are. However, unlike other beings, humans are endowed with the capacity to realise their inner reality and to become what they really are. Becoming what we really are is the purpose of our life. This is spirituality—the state of being one with spirit (energy). We all are at different stages of our journey towards achieving this purpose. Some studies have identified the people who have reached higher levels of their spiritual journey. Their number still remains small but growing steadily. Maslow (1997), called them the 'self-actualisers'. He believed that a society with eight per cent of self-actualising people would soon be a self-actualising society. Because self-actualisers act as agents of change and their behaviour and the activities, they initiate inspire others around them. Michael (1983, quoted in Maslow 1997) called such people 'Inner-Directed' and predicted that by 1990 the inner-directed will constitute nearly a third of the US population. In their study in Australia and the United Kingdom, Hamilton and Denniss[14] identified a similar phenomenon, a group of people whom they called 'downshifters'.

---

[14]Hamilton, C. and R. Dennis (2005) *Affluenza: When Too Much is never Enough* (Crows nest NSW Australia: Allen & Unwin).

There is a consensus among some modern spiritual teachers, scientists, academics and philosophers, that a sort of spiritual awakening is taking place across the planet, especially in the Western world. Tolle[15] called it the transformation of human consciousness and states that 'A still relatively small but rapidly growing percentage of humanity is already experiencing within themselves the breakup of the old egoic mind pattern and the emergence of a new dimension of consciousness" (p. 21). David Tacey,[16] in his *Spirituality Revolution: The Emergence of Contemporary Spirituality,* identified a new trend emerging across the Western world, which he called a 'spirituality revolution'. He recognised the growing interest in spirituality among students and youth. Ulluwishewa (2014) noticed this trend in his book *Spirituality and Sustainable Development* and called the emerging class of spiritually evolved people 'inner-guided'.

As mentioned, natural systems are inherently sustainable because all their components are designed to act as integral parts of the whole. They have no capacity to choose and act otherwise. Hence, they act for the well-being of the whole. On the other hand, humans are endowed with the capacity to choose—choose to act either as integral parts of the whole or as self-centred individual. Most of us have chosen the latter, identify ourselves with the matter-self and seek pleasure. Those who are powerful exploit their powerless fellow human beings and nature for their advantage without considering its consequences for long-term sustainability and happiness. On the other hand, those of us who are spiritually evolved (inner-guided) choose to act as integral parts of the whole. The inner-guided are driven, not by pleasure-seeking, but by love. They make use of their knowledge, skills, talents and creativity for the well-being of the whole. As their number, influence and power increase, the human-made systems are most likely to become happier and more sustainable. The case study below will explain how.

Spirituality and Sustainability of the Global Economic System: A Case Study
Source: Ulluwishewa, Rohana (2014) *Spirituality and Sustainable Development* (Basingstoke: Palgrave Macmillan)

Identifying Global Socio-Spiritual Classes: The process of identifying global socio-spiritual classes involves two steps. In the first step, the world's total population is divided into two groups. (1) The people who are motivated, not by materialistic external gains, but by non-material gains such as inner peace, joy and spiritual happiness. They are still a tiny minority. They are labelled here as 'the inner-guided people'. The inner-guided people include Maslow's self-actualisers, Hamilton and Dennis's 'downshifters' and

---

[15]Tolle, E. (2009) *A New Earth: Create a better Life* (Australia: penguin Books).

[16]Tacey, David (2004) *The Spirituality Revolution: The Emergence of Contemporary Spirituality* (Hove and New York: Brunner-Routledge).

Table 10.1 Global socio-spiritual classes: summary characteristics

Poor	Dissatisfiers	Overconsumers	Elites	Inner-guided
Material poverty	No material poverty, but psychological poverty	No material poverty, but psychological poverty	No material poverty, but psychological poverty	Neither material poverty, nor psychological poverty
Income is inadequate to gratify basic survival needs	Income is adequate to gratify basic survival needs, but discontent	Income is adequate to gratify basic survival needs, but discontent	Income is adequate to gratify basic survival needs, but discontent	Income is adequate to gratify basic survival needs; contended
Believe happiness can be found if basic survival needs are gratified; struggling to earn to meet basic survival needs	Believe happiness can be found if they enter the consumer class; struggling to earn more in order to enter the level of consumer class	Already entered the consumer class, but discontent; believe happiness can be found if they could consumer more than others around them	Already entered the consumer class, but discontent, believe happiness can be found if they could accumulate more wealth	Gain happiness from inner peace and loving relationships with others; not seeking higher income
Suffering physically and mentally	Suffering mentally	Suffering mentally	Suffering mentally	Neither suffering mentally nor suffering physically
Overexploit environment	Overexploit environment	Overexploit and pollute environment	Overexploit and pollute environment; exploit powerless human beings	Do not exploit/pollute environment, and do not exploit other human beings
Spiritually underdeveloped	Spiritually Underdeveloped	Spiritually Underdeveloped	Spiritually Underdeveloped	Spiritually Developed

like-minded people. They are less interested in economic pursuits that are exclusively aimed at material gains. (2) The people who are motivated by material gains and are, therefore, actively involved *in* economic activities of the global economic system. They are the majority and are spiritually underdeveloped. In the second step, the spiritually underdeveloped people are divided into four classes: (1) *The elites* include global elites, national elites and local elites; (2) *The overconsumers*: those who serve the interests of elites, they are materially rich and consume more than they actually need; (3) *The poor*: those who live below the poverty line, and they consume less than they need; and (4) *Dissatisfiers*: those who have raised themselves above
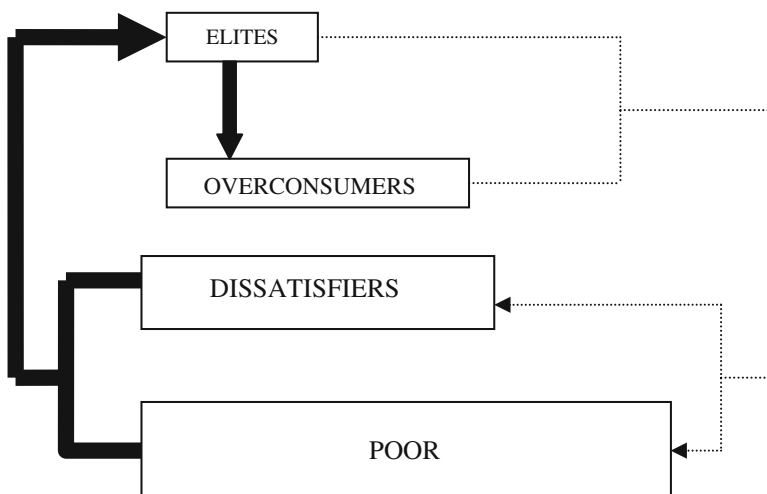
Fig. 10.1 Flow of material wealth in the global economic system

the poverty line and are able to gratify their needs, but are not satisfied, because they wish to follow the lifestyle of the overconsumers (Table 10.1).

Class Relations, Unsustainability and Unhappiness: As illustrated in Fig. 10.1, the material wealth gained by exploiting the poor and the dissatisfiers is being accumulated in the elites and the overconsumers. Therefore, unlike in natural systems, there is no proportionate return flow in the global economic system. Self-centredness and greed in the spiritually underdeveloped human mind, especially in the mind of the elites and the overconsumers, cause unsustainability and unhappiness in world. The global economic system is a product of the spiritually underdeveloped human mind.

How Could Spirituality Bring Sustainability and Happiness to the World?

As graphically illustrated in Fig. 10.2, as the people develop spiritually and become inner-guided, they are motivated by love, compassion and wisdom to share their resources with their poor fellow human beings; the cooperation thus growing between the rich and the poor gives rise to a new form of economy in which business is viewed as selfless service motivated by love. Such a form of economy can alleviate poverty and inequality, achieve environmental sustainability and deliver happiness and peace to the world.
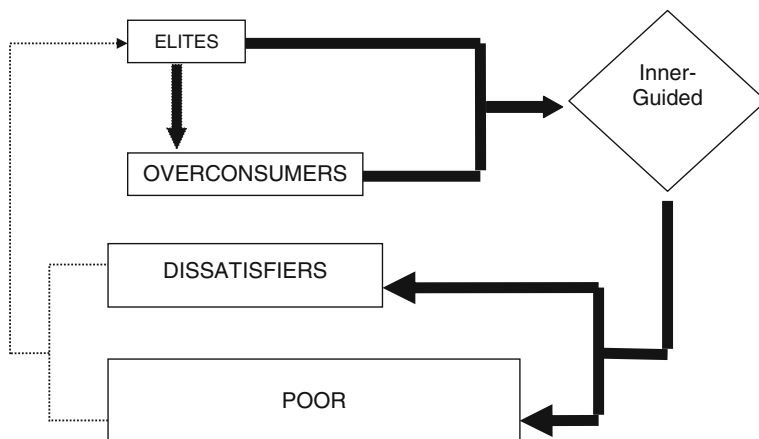
Fig. 10.2 Flow of wealth in the global economic system as inner-guided population increases

Questions for discussion

1. With reference to the case study, discuss how our spiritual underdevelopment brings unsustainability and unhappiness to the world.
2. Explain how spiritual growth could enhance sustainability and happiness.

Conclusion

External changes are necessary but inadequate to achieving sustainability and delivering happiness to all. Therefore, our attention should be focused on inner changes, the changes which make our relationships with fellow human beings and with nature less self-centred and more loving. This study reveals that the absence of such relationships is the root cause of the unsustainability and unhappiness evident everywhere in the world. Our relationships are self-centred, exploitative and therefore lead to unsustainability and unhappiness. However, the good news is that we are endowed with the capacity to reduce our self-centredness. All great religions and non-religious spiritual practices can be considered as different pathways to achieving this goal.

Overall Reflection Questions

1. Elaborate spirit and spirituality in scientific terms.
2. Explain why natural systems are inherently sustainable and human-made systems are not.
3. With reference to scientific evidence, differentiate pleasure from happiness and explain how our pleasure-seeking brings unsustainability and unhappiness to the world.
4. Explain how spirituality could bring sustainability and happiness to the world.
5. Explain the purpose of life in scientific terms. How could achieving the purpose contribute to sustainability and happiness?

Case Studies: Spirituality and Sustainability

11

Elizabeth F.R. Gingerich

Abstract

This chapter presents select case summaries which highlight certain teachings and behaviors which have affected the business decision-making skills of several well-known business leaders. Exposure to religious teachings and interaction with family members, school instructors, friends, and work colleagues may have intentionally—or even unwittingly—created an impressionable effect upon each of the following featured entrepreneurs, predisposing them to an astute awareness of social obligations and commitment to environmental stewardship. It is that certain individual, imbued with respect, understanding, and benevolence toward others and dedication to the preservation of resources for future generations, who embraces moments of intuitive perception with a newfound and all-encompassing passion and zeal, and moves him outside of his comfort zone, prepared to act, risk, and lead. These summaries are followed by a particular case study of a sustainable initiative launched in the United States as narrated through segments of an interview. Questions are then presented about both the selected case and the chapter overall for the reader to reflect upon and discuss.

Interface Global (Ray C. Anderson, Atlanta, GA, USA)

If not me, then who? If not now, then when? No longer can our use of 'God's currency' go unchecked. We must carefully measure the use of earth's resources to produce manmade products and then we will do well by doing good.

—Ray C. Anderson, Founder of Interface Global

E.F.R. Gingerich (✉)
Valparaiso University, Valparaiso, USA
e-mail: elizabeth.gingerich@valpo.edu

Following his self-described "epiphany" of an immediate call to environmental stewardship and restoration, the late Ray C. Anderson set forth to create a revolutionary new business paradigm in the mid-1990s—one which incorporated the triple bottom line of environmental and social responsibility as well as financial profitability. But what was his principal motivating and precipitating factor? Anderson was raised in a Southern Baptist environment. In 1973, he founded the now billion-dollar, largest carpet-making industry in the world. In 1994, Mr. Anderson read the book *The Ecology of Commerce*[1] by Paul Hawkin. This book constituted his life-changing experience, which precipitated the formation of a company committee assembled to discover how much material was being extracted from the earth to generate one dollar of profit for the company. After Anderson discovered the staggering statistics of his company's resource usage, he proclaimed that he was a "thief and plunderer of the earth" and committed his company to follow a new path of environmental sustainability.

Anderson had come to understand that all business successes bore a price—and that price was ultimately being borne by the planet, its inhabitants, and its symbiotic ecosystems. Specifically, at the time of authoring his first book, *Mid-Course Correction*,[2] Anderson discovered a particularly troublesome yet irrefutable fact about the business he had begun in 1973: 800 million pounds of non-renewable material extracted from the earth was required to generate 802 million dollars' worth of products. Instead of emphasizing Interface's successes in providing valuable goods to the public and employment opportunities, Anderson acknowledged that the perpetuation of this justification of "business as usual" could never obfuscate the real truth of conducting business in this manner. He realized that changes had to be made and that Interface had to be re-tooled. Retreat was never an option.

Interface had once thrived on the use of petrochemical, manmade materials. By the mid-1990s, the company embraced a firm commitment to recycle, reuse, and recapture waste materials not only generated by Interface, but by its competitors as well. In this manner, Interface could continue its business operations in good conscience without ever extracting another drop of oil from the earth. Anderson's vision, and the reality of an ever-evolving multinational corporation, continues to bear fruit as Interface is saving millions of dollars annually through material recapture and reuse. At the time of the release of *Mid-Course Correction*, Interface had successfully reduced greenhouse gas emissions by 60 % in absolute tonnage and many of its operations were being powered through solar, wind, and methane gas recapture—all renewable sources of energy.

---

[1]Paul Hawken, *The Ecology of Commerce: A Declaration of Sustainability* (New York: Harper Business, 1993).

[2]Ray C. Anderson, *Mid-course Correction: Toward a Sustainable Enterprise: The Interface Model* (Atlanta, Ga.: Peregrinzilla Press, 1998).

While "doing good" focuses upon the responsible production of a useful product without further usurping Earth's resources, Interface's "doing good" had resulted in the company "doing well" fiscally. Anderson recognized that generating a profit would emanate from genuinely gaining the public's confidence that the manufacturer was truly producing a sustainable product. Resource-efficient companies could attract not only favorable public opinion and investment opportunities, but also woo suppliers and vendors. In this regard, investors have moved to the adoption of a triple-bottom-line measure of business success, employing financial, ecological, and socially responsible delimiters. With the revelation of the dying world, more and more investors have begun to demand socially responsible investments and redefining the products that are necessary for comfortable living. Frivolous products and throwaways, as Anderson asserted, must give way to items that assist human health and do not deplete the earth's resources or thwart resource efficiency. Any other mindset would only serve to threaten the existence of humankind. As Anderson firmly believed, there was no alternative but to forge a new way of defining consumption and discarding the once entrenched principles of unlimited natural resources and technological panaceas.

Anderson emphasized that wealth and reputation were not necessary qualifications or characteristics of an individual driven to succeed. Passion and the motivation fueled by notion of a greater purpose—the knowledge that "Davids" really do conquer "Goliaths"—would instead dictate the next generation of business and industrial leaders. Before this could occur, however, business and industry must first understand, achieve, and promote the influence of the concept of sustainability. Employing newfound knowledge is certainly a bold first step; sharing this knowledge is a dual responsibility. As emphasized by Anderson in redesigning his business philosophy and paradigm, success would only be achieved by truly living for a higher purpose and for one another.

The Amish (Glen and Lamar Schmucker, Nappanee, Indiana, USA)

> God put us here to take care of the Earth. What we need to do is to educate ourselves on what it takes to maintain the Earth — not just let it go.
>
> —Glen & Lamar Schmucker, Co-Owners of HomeStyle Furniture

Amish communities are concentrated throughout portions of the Midwest, including Central Indiana. This is an area marked by the absence of an absolute social hierarchy. What is present is an interconnected community where the family plays center stage and where Jesus Christ is perceived to be the sole focus of how they live their lives. The community has adopted certain rules to conform their lifestyles which are not so much biblically dictated, but simply provide guidance in living "a more godly life." Surprisingly, there is no proselytizing or intentional

exclusion of outsiders. The Amish of Central Indiana are regarded as one large family, divided into different districts, for better organization.

The Amish perceive themselves as stewards of God's earth; by their activities, they could be regarded as the original proponents of recycling, reusing, and reducing. Everything has a use and a life span and nothing is wasted; socks are darned, humility is encouraged (no pictures or mirrors are permitted), all dress is similarly coordinated to age and gender, hair is cut at home, food is grown organically, and there is no need for cosmetics—all of these tenets of living aids the calm, humble life. Each home-farm compound has a windmill to help draw water for household and animal husbandry needs. There is no violence or need for guns, weapons, or locked doors. Horse-driven carriages are the primary form of transportation.

Respect for the environment is also a guiding business principle for at least one Amish district in Central Indiana. Maintaining a profitable business is a question of economic survival and is achieved with surprising acumen, but strictly in accordance with the fundamental belief that God has entrusted His most special gifts to use for necessities, and in moderation, and ever cognizant of replenishing resources of the earth and meeting the needs of others.

One Water (Duncan Goose, UK)

> To make profit is the remit of the businessman, to give back is the remit of the philanthropist, but the two need not be mutually exclusive.
>
> —Duncan Goose (U.K.), Founder and President of One Water

Scottish-born Duncan Goose, founder of One Water, was born into a family who largely ascribed to the religious tenets of the Church of England and family members who stressed respect for, and generosity toward others, and, as Goose further describes, living the biblical phrase: "Do unto others as you would have them do unto you."

Goose, at the age of ten, was sent to a boarding school run by religious representatives of the Church of England. The tenets of the Church were thoroughly infused into the school's prescribed academic instruction. From 1998 to 2000, Goose took a temporary leave of absence from his place of employment, bought a motorbike, and fulfilled his life's dream of riding around the world. When he traveled across Honduras, Hurricane Mitch[3] hit the Central American nation with immense force and devastation, leading to the deaths of 30,000 people and property

---

[3]Acknowledged to be the second deadliest Atlantic hurricane on record, Hurricane Mitch devastated a large portion of Central America, particularly the countries of Honduras and Nicaragua, in late October, 1998.

losses approximating $4 billion. Goose helped with the cleanup efforts to the best of his abilities, but it became very obvious that most of the damage was irreversible. After he returned to London to resume his job responsibilities, he entered a pub downtown one evening with several friends. One patron mentioned a statistic which he regarded as another epiphinal moment in his life. He asked other patrons if they were aware that 1 billion people in the world had no access to clean water and that environmental degradation and rising populations were rapidly exacerbating this situation. He then risked everything by leaving his job and liquidating all of his assets to invest in a new business enterprise: the production, manufacture, and distribution of "One Water."

Lands' End (Gary and Stephanie Comer, Chicago, Illinois, USA)

> The empathetic values that a person might associate with a spiritual philosophy or sense of altruism were certainly present.
>
> —Stephanie Comer speaking of her father, Gary Comer
> —founder of Lands' End—and his dedication to environmental protection.

Gary Comer, founder of Lands' End, championed the preservation and responsible stewardship of the environment. This passion originated during one of his sailing trips to the Arctic Circle in 2001. During this voyage, he was surprised by the lack of surface ice during that time of the year which typically would block passage. As further research in this region demonstrated the pervasive effects of climate change, he began funding the climate change research efforts of qualified scientists and other leaders in this field. This newfound area of interest, coupled with his work in urban reform, community organization, and health care, became the fundamental objectives of the Comer Science and Education Foundation.

Comer's visit to the Arctic Circle was somewhat of a directional awakening for Comer—so much so that he reached out to individual scientists and contributed liberally to climate change studies. Although already aware of climate change at that point, personally witnessing the actual melting and traveling through the Northwest Passage which had formerly been ice-locked, allowed Comer to speak from a place of conviction.

Following Comer's commitment to promoting environmental awareness, Sears and its Lands' End stores significantly began greening their operations by reducing catalog paper consumption by 50 % between 2004 and 2008, increasing the amount of recycled and sustainably harvested fiber in packaging materials, installing community gardens on company property, and engineering paperless work stations. In 2009, Sears Holding Company earned the Environmental Protection Agency's ENERGY STAR program's Retailer of the Year designation.

Case Study: Farm Sanctuary

In April, 2015, author and activist Gene Baur launched his second book, Living the Farm Sanctuary Life,[4] which exposes the extent and level of cruelty shown toward animals—particularly those typically associated with factory farms and slaughterhouses. Whereas historically, ethical leadership has been associated with human activities, Baur has crusaded, over the course of three decades, to reveal people's inhumane treatment of these animals, their sentient features—as juxtaposed to their treatment as mere commodities—and the degradation of the environment, human health, and biodiversity associated with commercial farming.

- *According to the Food and Agricultural Organization for the United Nations (FAO):*
- *Livestock production is the largest user of agricultural land either for grazing or growing feed. It currently accounts for approximately 40 % of the gross value of world agricultural production. And with a growing global population and shared prosperity, there is a commensurate increased demand for meat, fertilizer, dairy products, wool, leather, and forms of transport. In fact, global demand is projected to increase by 70 % to feed a population estimated to reach 9.6 billion by 2050.*
- *The rapid growth of the livestock sector has had considerable impact on the environment, heavily contributing to deforestation in some countries, particularly in Latin America. Also, it has been a major factor contributing to soil erosion, desertification, increased disease transmission between animals and humans, greenhouse gas (GHG) emissions, polluted water supplies, and antibiotics resistance—all threatening human health. And while the entire transport system accounts for 12–13 % of GHGs contributing to climate change, it is livestock production which is the primary culprit, accounting for an unprecedented 18 %.*
- *Overstocking land with grazing animals causes significant soil erosion, desertification, and the loss of plant and animal biodiversity. Public health hazards are increasing, especially with regard to waste generated from industrial livestock facilities. These operations pollute water supplies, emit greenhouse gases, and introduce an overabundance of antibiotics into the human system.*

The following is a portion of an interview, conducted by Elizabeth Gingerich, Editor-in-Chief of the *Journal of Values-Based Leadership (JVBL)*, of

---

[4]Baur, Gene and Stone, Gene. *Living the Farm Sanctuary Life: The Ultimate Guide to Eating Mindfully, Living Longer, and Feeling Better Every Day*. New York, NY: Rodale, 2015.

Gene Baur, Founder and President of Farm Sanctuary, in Watkins Glen, New York, on June 19, 2015.[5]

Q: On June 18, 2015, the Pope issued his encyclical on Climate Change. It is uniquely entitled *On Care for our Common Home*.[6] Paragraph 130 reads:

In the philosophical and theological vision of the human being and of creation, it is clear that the human person, endowed with reason and knowledge, is not an external factor to be excluded. While human intervention on plants and animals is permissible when it pertains to the necessities of human life…human power has limits and that it is contrary to human dignity to cause animals to suffer or die needlessly. [All such use and experimentation on animals] require a religious respect for the integrity of creation. [A study of ecology]… necessarily entails reflection and debate about the conditions required for the life and survival of society, and the honesty needed to question certain models of development, production, and consumption. It cannot be emphasized enough how everything is interconnected.

Do you think that this will help many to change their current perspectives and perhaps pressure politicians to legislate change with respect to the inequities and abuses of factory farming?

I think the Pope making a statement like that is significant and will be impactful; I believe that those who disagree with him will start rallying their troops to counter the efforts to advance legislation and policies that are consistent with his message. The Pope's message and voice are very important. Here he is, the leader of this giant body and he is making these statements, recognizing that we are all interconnected in the web of life. He is saying, in a sense, that when we harm others, we harm ourselves because we are all connected. When he talks about killing unnecessarily, or causing suffering unnecessarily, to me, this jumps to the point that if we can live well without killing and eating other animals, why wouldn't we? You know that his language is vague there and that is probably purposeful, but he is explicit about animal experimentation and says that it is not to be done unless for human necessity. It is not to be done to test cosmetics, but if it advances human health and wellbeing, that is where it gets a little more complex. And there are different animal rights activists' perspectives. But I think that his statement is very important and I hope that it will be very impactful.

I tend to connect most with the liberation theology Catholic types like Greg Boyle. He was a priest and one of my teachers in high school; he runs

[5]Reprinted with the permission of the *Journal of Values-Based Leadership*: (2016) "Farm Sanctuary: Caring for our Planet (Interview with Gene Baur)," *The Journal of Values-Based Leadership*: Vol. 9: Iss. 1, Article 6. The complete interview is available at: http://scholar.valpo.edu/jvbl/vol9/iss1/6.

[6]Francis, *Laudato Si': On Care for Our Common Home* [Encyclical], May 24, 2015.

Homeboy Industries in L.A., which operates with the motto that "nothing stops a bullet like a job." He works with gangs and attempts to improve people's lives. So with the Catholic Church, you have different types and perspectives. So I am grateful that the Pope is acknowledging that all lives, including animals' lives, matter. Hopefully, his message will resonate within the Catholic Church, and beyond. I think that he is tapping into ancient wisdom—the core of Christianity and the core of every major faith.

Q: And the release of this encyclical was, apparently, timed with the advent of the "Road to Paris," a conference, one of the largest planned, on climate change this December. Government, business, and NGO leaders are expected to attend. Are you, or do you know of anyone who will be present there to speak on the impact of the livestock business on climate change?

I can't be there unfortunately, but am speaking with colleagues, and hope some will be in attendance. This is an important topic. You know that Al Gore introduced "An Inconvenient Truth"[7] on a universal scale over 20 years ago, but it really did not address the effects of livestock farming on climate change even though science indicates that the CO_2 emissions from the livestock industry—including the removal and clearing of property for growing the feed necessary for these animals—is more than that emitted from the entire transport industry.

Q: Would you say that business in general is harmful to animals?

We are not anti-business; we are anti-cruelty. We are opposed to irresponsible and destructive business practices.

Q: You have three farms in the United States: Watkins Glen, Orland and Acton, California. In considering the effects of climate change on your business operations, we can see the abundance of rain here in New York, but California is suffering from one of its worst droughts ever. How are you handling this crisis? Water rationing just among humans has set off some serious, and dangerous repercussions [Sao Paulo, Brazil is an example]. I would imagine that if this extends on, that animal needs will definitely be secondary to those of humans. Are you experiencing any problems now? Do you have any contingency plans in the event rationing is next?

Our sanctuaries are relatively small in terms of the overall water we use. Of course, it can be a struggle especially during draughts and we are doing what we can to conserve, but I think what ultimately needs to happen, and Moby[8] is working on this, is to push for policies that stop subsidies for animal agriculture which are terribly wasteful and inefficient. We could feed ten

---

[7]An Inconvenient Truth: A Global Warning. Dir. Davis Guggenheim. Perf. Al Gore. Paramount, 2006.

[8]An American electronic singer song-writer, vegan, and animal rights activist.

times more people by growing and eating them directly, instead of growing plants and feeding them to animals who are then slaughtered.

I have seen slaughterhouses that use water in a way that seems to be purposefully wasteful. For example, there was a slaughterhouse using fire-houses to herd calves to the kill floor. I think they did this for a few reasons. First, it was easy just to push the calves in this way and to rinse off feces and dirt at the same time. I think another reason is that this was to maintain a water allotment. By establishing a quota and showing their historical use, they can maintain access to a lot of water.

And they need to maintain that access and pay far below the market value for this precious and scarce resource. I read recently where some cities that needed water struck a deal with farmers to get water at a big markup. So I think the area that needs to be looked at is animal agriculture. You have so much water that is used for animal food that could be more efficiently used for human food.

Q: As science shows, methane gas—both a product of landfill waste and of buried cow manure—is more toxic than what comes out of a tailpipe. There are new technologies, however, used on certain dairy farms that capture the methane gas and use same for energy—much like other businesses are currently doing. So could it be argued that this sort of by-product is not as harmful to the climate as many would think it to be?

It's less bad to capture methane gas than not, but it's far better to prevent excess methane from being produced at all. The best way to do that is to get away from raising animals for slaughter.

Q: I am from Indiana where approximately 85 % of the corn—and soy-beans for that matter—grown is used to feed livestock. What would those farmers do in the alternative?

Grow corn or other crops for human consumption—that's what we are advocating across the board. It just makes sense for human health and animal well-being.

Q: Through my interviews and research, there appears to be a common thread which helped to shape certain prominent individuals as to who they are and what they were going to do in their respective business pursuits. This common element was spirituality or, in other words, the influence and impact of a religious upbringing. You note in previous interviews that the majority of mankind has the capacity for compassion and you have already mentioned here that you grew up in a Catholic household and attended a Jesuit high school. Do you believe that what you have done and are doing is motivated or influenced, in any manner, by a sense of spirituality and a need to be a steward?

I think so. I grew up and was encouraged to be an engineer and make money, or even to go into the military service, but I didn't want to be a cog in the wheel that was causing so much harm. I had gone to Catholic school and was bombarded by moral messages like "Thou shall not kill;" "Do unto others;" "Helping the least of these"—those sorts of things struck a chord. The harsh tendency to judge was a turn off. I believe the environment and animals should be part of our sphere of compassion and concern. I remember seeing trees cut down as a child right across the street from my parent's house in the hills … and this really bothered me … as well as animals harmed by human activity. I felt that we were not behaving in a responsible way to the earth and to the rest of creation…and I just did not want to be part of this monstrous machine and so in high school and college, I started looking for ways to make a positive difference. I learned about factory farming—the fact that it was causing so much harm to the animals, to people, and to the earth—and believed it needed to be challenged. It is an affront to creation and our own humanity. And all of us grew up unwittingly supporting it—eating animals without thinking about what we were doing. So we grew up eating certain ways because it was the norm and I came to see how bad becomes normal.

Q: How old where you when you started to have these feelings?

I think we're all born with an innate connection to animals and the natural world, which tends to be indoctrinated out of us. When that tree was cut down, I was probably younger than 10. It was just a natural feeling. I was just generally bothered by the harm humans were causing because of our hubris, thoughtlessness, and carelessness—our basic failure to empathize with others. To me, it was not being kind to the least of these. Another one of those quotes I grew up with was "To whom much is given much is expected/required." And humans have a lot of power. Another resonant quote is that "absolute power corrupts absolutely." So we are in a position to have power and with that, I believe that we have been very irresponsible. The earth is suffering, as well as the animals, and so are we, and it doesn't have to be that way. In the U.S., we are an especially affluent nation, and use a huge amount of the earth's resources.

Q: The U.N.'s *Declaration of Human Rights*[9] states: "Everyone has the right to life, liberty and security of person." The declaration specifies dozens of particular human rights, including the right to be free from slavery, torture, and cruel or degrading treatment…. Do you believe that this should extend to animals and if so, why?

I would love to see that applied to animals as well. When we enslave others, we harm them and we harm ourselves. Animals have feelings and relationships and when we treat them in an inhumane way, it's bad for

---

[9]The United Nations. *Universal Declaration of Human Rights*. 1948.

everybody. For me, the vegan lifestyle boils down to our relationship with others and ideally, our goal should be to create mutually-beneficial relationships—with humans, with animals, with the earth … and to live in respectful ways. Certain species are different than others, certain animals are different from other animals, and certain people are different from other people. So there are differences, but there are similarities as well, especially when it comes to the right to live, to not be enslaved, and to not be abused. I think that all life, all creatures deserve that.

There are prejudices… beliefs that certain animals exist to be exploited in a particular way and that is their station in life. Such beliefs lead to discriminatory practices and certainly not to mutually beneficial relationships. Prejudicial beliefs allow bad things to happen and that leads to validations and rationalizations where we say things like "They don't deserve any better." Similar statements have been made forever about various exploited victims, along with notions like "That's what they are here for" or "That is the natural way" and "That is the way it is supposed to be." We should rethink such statements, and also consider that just because humans have done something for a long time doesn't mean we should continue doing it.

Q: So perhaps the question should be, "Is this how you wish to be treated?" Do you ascribe to the understanding that a cause or way of thinking can't be preached, but can only be demonstrated by providing a model?

Yes, I do, as preaching to others often puts up the walls. Our goal is to knock down walls and open up hearts, and I believe modeling kindness and setting a good example are effective ways to do that.

There is often an inconsistency between our ideals and our actions; between our hopes and our daily behaviors. It's impossible to be perfect. You know that no human being is perfect. Just walking on the planet means we are going to cause some harm. But to me, being vegan is a way to live as harmlessly as possible and to live in empathy with others. In the case of animal agriculture, billions of animals are exploited every year and are subjected to extreme cruelty.

Humans control every aspect of animals' lives from conception to slaughter. We exert complete control over the animals' lives and with that comes responsibility. When it comes to factory farming, we are not behaving responsibly. It is an affront to animals, and to our humanity. I've spoken with academics and experts on Catholic doctrine and have been told that from the Catholic perspective, it is not forbidden to eat meat if it is necessary for our survival, but it's not ideal. So it was formally recognized that it's not ideal. If we have a choice, it's better not to eat animals. That's the direction that I think things should go.

Q: In a past presentation, you posed the question of the mentality of those people who work in slaughterhouses on a regular basis—where killing becomes rote or a routine act. Could you compare this mindset to, let's say, a returning war veteran suffering from PTSD?

Absolutely. Farm Sanctuary is a place where traumatized animal victims' lives are transformed. It is also a place where people's lives are transformed, and I would love for us to help heal war veterans and others who have experienced violence and killing. Killing and violence should not be the norm. The sanctuary is a place of healing for animals and people.

Q: Many people today—especially business students and entrepreneurs seeking to embrace a code of ethics—relate to certain life philosophies. One—as you mentioned at the beginning of this interview—is utilitarianism. The basic premise of utilitarianism is, as I understand, that "right" actions maximize utility and generate benefits, or, in the alternative, minimize pain, and unhappiness. An important aspect of this philosophy is that the interests—and consequences—of all parties involved in a particular situation must be taken into account. Is this a philosophy that could be applied to the rights of animals?

To some extent, yes. It is very pragmatic; it is very logical. Peter Singer has articulated it well and I think he does a good job speaking about prejudices that exist and challenging certain assumptions people have. I'm kind of a hybrid between a utilitarian and the ecofeminist philosophers who see us more as part of a web. Utilitarianism tries to quantify pain and suffering which is pretty hard to do. It seeks to quantify qualitative characteristics, which is challenging. I apply some utilitarian thinking so that if someone is going to eat animals, and if they choose not to eat one species, I understand how not eating chickens means saving more lives than not eating cows since cows are so much bigger with more meat per life. They're very logical. I sometimes apply utilitarian logic in response to the question about whether plants experience suffering by saying that if plants do suffer, the best way to prevent that problem is to eat plants directly because when you eat animals, it requires a lot more plants to be killed to feed the animals. I also respond to that question by saying: if you have children, and you want to teach them about food, taking them to a berry patch to pick strawberries is a very different experience than taking them to a slaughterhouse to watch animals being killed. That is more of an experiential approach, and less of a utilitarian approach. To me, it really is about relationships and whether they are beneficial or not.

Q: Do you think we go further as several businesses have done and become restorative?

There is the term "sustainable agriculture" and instead it could be "regenerative agriculture." It's just not about sustaining; it's about restoring and improving since we have made such a mess of so many things.

Q: And that appears to be what you are doing. Aim for the top and project restoration. If you set the bar too low, some would say about small changes, "Well, that's good enough."

Every positive step is worth encouraging, while also recognizing that we can do more to create kindness in our world. It's important to empower and inspire, and ultimately to accelerate change.

Case Study Questions

After reading and reflecting upon the *Farm Sanctuary* interview, how would you answer the following questions?

1. *What actions, if any, would you contemplate or commit to doing in response to this interview?*
2. *If more individuals adopted the viewpoints of the interviewee, what would you propose to do to offset inevitable job losses?*
3. *What effect in changing factory farm practices might be triggered by Pope Francis's June 2015 encyclical?*
4. *What types of alternative land management policies would you propose to decrease factory farming?*
5. *Do you believe in the dominance of mankind over animals whereby their skins, body parts, and entire lives are controlled?*

Chapter Questions

This chapter has presented selected studies of leaders whose business decisions—often radically changing their respective organizational structures and business practices—have been influenced by many external and oftentimes spiritual factors. In contemplating the place for spirituality in creating, maintaining, and growing sustainable business operations, please consider the following questions:

1. *Is it possible to do well financially by doing good in the environmental and social responsibility contexts?*

2. *Must a person ascribe to a particular faith or religion to be considered spiritual?*
3. *Are laws, rules, and regulations necessary to supplement one's spirituality in rectifying and/or lessening further degradation of the planet?*
4. *How do you approach those who profess values-based practices which conflict with your own?*
5. *Is the belief in a higher power a prerequisite to embracing, creating, and implementing environmentally-sustainable policies and practices?*

References

Anderson, R. C. (1998). *Mid-course correction: Toward a sustainable enterprise: The interface model*. Atlanta, Ga.: Peregrinzilla Press.

Baur, G., & Stone, G. (2015). *Living the farm sanctuary life: The ultimate guide to eating mindfully, living longer, and feeling better every day*. New York, NY: Rodale.

Farm Sanctuary: Caring for our Planet (Interview with Gene Baur). *The Journal of Values-Based Leadership*, 9(1). Article 6, 2016. Available at: http://scholar.valpo.edu/jvbl/vol9/iss1/6

Francis. (2015). *Laudato Si': On care for our common home [Encyclical]*. May 24, 2015.

Guggenheim, D., & Gore, A. (2006). *An inconvenient truth: A global warning*. Paramount.

Hawken, P. (1993). *The ecology of commerce: A declaration of sustainability*. New York: Harper Business.

The United Nations. (1948). *Universal declaration of human rights*.

Putting Glam into Green: A Case for Sustainable Luxury Fashion

12

Xenya Cherny-Scanlon

Abstract

At first sight, luxury and sustainability go together like tofu and caviar. In reality, the two share many of the same values: respect for tradition and craftsmanship, the preference given to quality over quantity and the quest for harmony between humans and nature. With global sales of personal luxury goods exceeding US$280 billion a year worldwide, the luxury industry can play a leading role in promoting a global transition towards more responsible fashion. High fashion has both significant dependence and impacts in terms of environmental sustainability. Natural materials, such as fine silks and wools, rare leathers and pearls, are sought after by affluent consumers and are closely associated with luxury brands. However, sustainability has an image problem when it comes to fashion. On the one hand, there is mainstream, disposable 'fast fashion' that almost everyone desires. And on the other, there is the emerging 'sustainable' fashion, which still has a marginal market share and is by and large considered uncool. Is it possible to bridge this huge gap? Are consumers, designers and investors ready to embrace a greener, yet still glamorous, style? The chapter explores sustainability as the source of the luxury fashion industry's innovation and competitiveness in the twenty-first century.

X. Cherny-Scanlon (✉)
Sustainability Management School (SUMAS), Gland, Switzerland
e-mail: xenya@greenstilettos.com

Luxury and Sustainability: From Strange Bedfellows to Natural Allies?

At first sight, luxury and sustainability have little in common: some may even say they go together like tofu and caviar. Indeed, while luxury is often synonymous with excess and conspicuous consumption, sustainability is often associated with 'scarcity mentality', the need to restrain our desires and sacrifice our dreams.

For example, Misha Pinkhasov, author of *Real Luxury: How Luxury Brands Can Create Value for the Long Term*, argues that 'to many, sustainability still means slower, more complicated, less materially satisfying, less profitable. This makes the notion of sustainable luxury seem like a paradox'.[1]

The definition of sustainability itself, contained in the 1987 Our Common Future report of the World Commission on Environment and Development (known as the Brundtland Commission) is 'meeting the current generation's needs without compromising those of future generations'.[2]

In reality, however, luxury and sustainability share many of the same values: respect for tradition and craftsmanship, the preference given to quality over quantity and the quest for harmony between humans and nature. In the words of renowned luxury expert Jean-Noël Kapferer, 'Luxury is at its essence very close to sustainable preoccupations because it is nourished by rarity and beauty and thus has an interest in preserving them'.[3]

Luxury today is a dynamic global industry, with sales of personal luxury goods exceeding US 280 billion a year worldwide. This is a recent self-defined sector composed of some 290 companies and brands.[4]

While many definitions of luxury and luxury goods exist, for the purposes of this article, these are defined as non-essential products which are sold at a premium price, whose supply is naturally limited, and that require a high level of skills and/or craftsmanship along the value chain.

Within the luxury sector, luxury fashion (clothing and accessories) accounts for around US\$150 billion.[5] Some researchers argue that '…luxury fashion seems to be a contradiction in terms—as luxury it is supposed to last, but as fashion it is supposed to change frequently'.[6] This is the essence of the 'luxury fashion'

---

[1]Pinkhasov, M. (2015) 'From Sustainable Luxury to Luxurious Sustainability', *Huffington Post*, 20 April 2015, www.huffingtonpost.com/misha-pinkhasov/from-sustainable-luxury-t_b_7069074.html, accessed 25 June 2015.

[2]World Commission on Environment and Development (1987) *Our Common Future* (Oxford, UK: Oxford University Press).

[3]Kapferer, J-N. (2010) 'All That Glitters Is Not Green: The Challenge of Sustainable Luxury', *European Business Review*, November–December 2010: 40–45.

[4]Bain & Company, Inc. (2014) Luxury Goods Worldwide Market Study, http://www.bain.com/bainweb/PDFs/Bain_Worldwide_Luxury_Goods_Report_2014.pdf, accessed 31 October 2015.

[5]Ibid.

[6]Godard, F. and Seong, S. (2015) 'Is sustainable luxury fashion possible?', Sustainable Luxury: Managing Social and Environmental Performance in Iconic Brands (Sheffield, UK: Greenleaf Publishing).

oxymoron; however, one could argue that sustainability has a major role to play in reconciling these two largely contradictory concepts.

Luxury brands' social and environmental performance—from sourcing of raw materials to working conditions across the industry—is under increasing scrutiny not only by green activists and labour groups, but also governments, industry platforms and the society at large.

Although the direct sustainability impacts of the luxury sector pale in comparison with resource-intensive sectors such as mining, energy, agriculture or transport, it nonetheless has both a great dependence on the raw materials such as precious gemstones, rare textiles and exotic skins and the craftsmanship along its value chain, but also a high potential to influence suppliers and consumers by being an 'aspirational' sector—'the stuff of dreams' for many.

Luxury fashion brands in particular serve as key influencers for the fashion industry—estimated at over $2 trillion dollars—as a whole. It is therefore important to get these trendsetters to embrace sustainability and to use their massive influence over our planet's seven—going on nine—billion consumers.

Sustainability is a defining trend of the luxury industry in the twenty-first century. More than ever before, the luxury industry is striving for authenticity and redefining its values. There is a growing acknowledgment of the fact that sustainability is a part of luxury DNA and that the industry has an obvious stake in making a transition towards sustainability.

Ultimately, the essence of luxury is taking time to create long-term value—which is impossible without taking sustainability on board. Rather than being seen as strange bedfellows, luxury and sustainability must become natural allies in our quest for a more responsible production and consumption.

Of Furs and Feathers—Nature and High Fashion Through the Years

Ever since our ancestors used animal hides to protect themselves from the cold and the elements, the relationship between humans, nature and fashion has been one of the great interdependence and constant reinvention.

In ancient times, luxurious clothes were used to assert high social status and wealth, as well as to display one's refined taste. In many civilizations, the use of certain fashions or fibres was restricted to royalty, aristocracy and religious leaders. For example, Jason and his Argonauts set off on their perilous journey in search of the Golden Fleece, a symbol of authority and kingship. The legend has it that Chinese empress Lei Zu was the inventor of sericulture, thus starting the country's profitable silk trade and connecting China to the rest of the world.

In Latin America, the fine wool of a small animal *vicuña* was known as 'the fibre of gods', to be worn exclusively by Inca emperors. In seventeenth-century France, Louis XIV increased and emphasized fashion's importance by making it a part of social edict: the more expensively and fashionably dressed, the more important one was in the King's court. And in the nineteenth-century United States, the concern

over fashion's excessive use of birds' feathers as decorations for women's hats spurred the creation of one of the oldest nature conservation organizations, the Audubon Society. In recent decades, the use of animal hides, particularly fur, in the fashion and luxury industry has been a major bone of contention.

Nature is very often the source of the fashion industry's inspiration and profits. Natural materials, such as fine silks and wools, rare leathers and pearls, are sought after by affluent consumers and are closely associated with luxury brands. For example, a high-end crocodile handbag can fetch up to US$300,000, and the price of a vicuña wool scarf starts at around US$1,000.

Furthermore, numerous luxury brands capitalize on the enduring appeal of the wild by using charismatic animals in their marketing and branding strategies, and sometimes turning them into corporate logos—Jaguar and its famous 'leaper' and Lacoste with its signature crocodile are just two obvious examples.

> ### Box: Vicuña
>
> Vicuña is the smallest member of the Camelidae family, a cousin of llamas and alpacas. Considered as 'the fibre of gods' by the Incas, vicuña's unique and precious fleece was used exclusively to produce emperors' clothes. The ritual shearing of the animals, known as 'chaccu', took place every three to five years, after which the animals were released back into the wild.
>
> Following the European conquest, vicuña were nearly driven to extinction due to indiscriminate slaughter. By 1960, some 6000 individuals remained out of an estimated two million 500 years earlier. In response to the perilous state of vicuña populations, the Andean countries signed the Convention for the Conservation of Vicuña in 1969. Following the entry into force of CITES, international trade in vicuña was prohibited in 1975.
>
> By 1987, some populations had recovered so significantly that trade in cloth made from wool sheared from live animals was partially reopened. A further break-through for vicuña was achieved when the government of Peru, assisted by CITES, gave local communities the legal rights to manage vicuña populations and benefit from trade, as long as they protected the animals from poaching.
>
> In 1994, the International Vicuña Consortium, comprised of three companies, including Agnona (which was later acquired by the Ermenegildo Zegna Group) and Loro Piana, received the first authorization of legal vicuña trade from Peru. In the words of Paolo Zegna, chair of the Zegna Group: 'The reappearance of the vicuña on the international market, free of any moral concern, was greeted with enthusiasm by our customers'.
>
> Today, the Peruvian vicuña population, estimated at a healthy 190,000, is farmed sustainably to the benefit of local communities, the environment and the luxury industry. While certain benefit-sharing issues have not been fully resolved, vicuña is a hallmark example of sustainable sourcing of a luxury product entirely from the wild.

With technology poised to change the way we dress in the future, fashion designers are also experimenting with innovative fabrics that take their cue from the natural world. Biomimicry brings nature and technology together to create exciting new fabrics that are smarter and more sustainable. Some existing examples include a light-reflecting fabric that imitates the microscopic structure of the blue Morpho butterfly wing using nanotechnology; flame-resistant clothing suitable for fire-fighters' jackets and children's sleepwear produced with chitosan found in crab shells; and water-repellent and self-cleaning materials and fabrics inspired by the lotus leaf.[7]

3D printing technology, already used in the textile industry, has a yet untapped sustainability potential. For example, imagine a 3D printer with cartridges for proteins, carbohydrates and minerals instead of ink that, layer by microscopic layer, create new materials with precisely tuned functionality based on the principles gleaned from nature's billion-year R&D portfolio.

It is clear that we have only scratched the surface of nature's infinite ability to provide solutions for smarter, stronger and more sustainable fabrics. To quote biomimicry pioneer Janine Benyus, 'We realize that all our inventions have already appeared in nature in a more elegant form and at a lot less cost to the planet'.

The Rise—and Fall?—of 'Fast Fashion'

Over the last couple of decades, our relationship with fashion has changed dramatically. The good news is that fashion has become more accessible. On the whole, clothes have become increasingly cheaper.

Today, we spend much less of our household budgets on clothes and footwear than say 50 years ago. As a consequence, we buy more and more of them and wear them less and less. An average European sends 15 kilos of textiles per year to landfill. Even in Scandinavia, which has some of the world's highest recycling rates, only 3 % of clothes are recycled. At the high end of the fashion industry, unsold stock from designer collections is routinely destroyed at the end of each season in order to preserve 'brand exclusivity'.

Fashion is one of the most polluter in the world, second only to oil in terms of its environmental impact.[8] One-quarter of chemicals produced worldwide are used for textiles, and the industry is often noted as the number two polluter of clean water—after agriculture. The apparel sector's total natural capital cost is estimated to be

---

[7]Cherny-Scanlon, X. (2014) 'Seven fabrics inspired by nature: from the lotus leaf to butterflies and sharks', *Guardian Sustainable Fashion,* 29 July 2014, http://www.theguardian.com/sustainable-business/sustainable-fashion-blog/nature-fabrics-fashion-industry-biomimicry, accessed 16 October 2015.

[8]Fibre2Fashion (2012) *Changing the world through fashion at Rio+20* http://www.fibre2fashion.com/news/textile-news/newsdetails.aspx?news_id=112382, accessed 1 September 2015.

more than US$40 billion per year, equivalent to more than 6 % of the sector's revenue.[9]

The biggest sustainability challenges in the fashion industry are associated with the so-called 'fast fashion' model, which stands for disposable, cheap fashion delivered from the runway to the consumer as quickly as possible, often at a high social and environmental cost.[10]

While 'fast fashion' was initially aimed at cutting costs for mass consumer, a growing number of luxury fashion brands are also adopting the 'fast fashion' business model by cutting production cycles and outsourcing manufacturing to lower-cost countries, predominately in Asia. To draw a comparison in the category of fashion, Chanel—which still manufactures in Europe—produces eight collections per year compared to 26 at Zara, and the time-to-market is six weeks, twice as long as Zara's but still extremely tight.

To counter the 'fast fashion' trend, the concept of 'slow fashion'—a term coined by Kate Fletcher of the Centre for Sustainable Fashion and borrowed from the well-established 'slow food' movement—has emerged as a way to make us rethink our attitude to clothing.

The 2013 Rana Plaza tragedy in which over 1000 people died in a single garment factory collapse in Bangladesh opened many consumers' eyes to the harsh realities of $5 t-shirts and gave rise to greater cooperation on improving working conditions in the global apparel industry.

Although there were no high-end fashion brands visible in the ruins of Rana Plaza, outsourcing production means that any so-called 'luxury' fashion brand may run the same risk in the future. Meanwhile, Greenpeace's Detox Fashion campaign exposed several luxury companies (e.g. Prada, Dior, Versace) for their role in causing toxic pollution in China.[11]

For many, Rana Plaza was a turning point. And as a result of this tragedy, many more consumers and industry players—from high street to haute couture—have begun looking for more ethically and environmentally responsible fashion. A 'Fashion Revolution Day' aimed at raising consumer awareness about the true cost of fashion and catalyzing an industry-wide change—is now observed on 24 April, the anniversary of Rana Plaza, in over 80 countries.

In response to these concerns as well as pressure from environmental and labour groups, more and more companies in the apparel sector are developing sustainability strategies and programmes. These include commitments to a 'living wage' for workers and elimination of child labour on the social side; 'zero discharge' of

---

[9]Trucost (2014) Natural and social capital accounting in the apparel sector white paper http://www.trucost.com/_uploads/publishedResearch/CDP_images/SFA_GLASA_WhitePaper_NaturalCapitalAccountingintheApparelSector_DRAFT%20for%20public%20consultation.pdf, accessed 1 September 2015.

[10]Siegle, L. (2011) *To Die For: Is Fashion Wearing Out the World?* (London, UK: Fourth Estate).

[11]Greenpeace International (2014) *A Little Story about a Fashionable Lie: Hazardous chemicals in luxury branded clothing for children* (Amsterdam, The Netherlands: Greenpeace International).

toxic chemicals; and various carbon, water and waste reduction targets on the environmental side.

Industry-wide cooperation is also on the rise exemplified by initiatives such as Sustainable Apparel Coalition, which represents one-third of the global market share for clothing production, or UK-based Sustainable Clothing Action Plan, which brings together 12 key retailers with a combined 30 % share of the country's clothing retail market.

In continental Europe, industry bodies such as the Danish Fashion Institute and the Italian Chamber of Fashion have spearheaded initiatives on sustainability in the fashion industry. More and more design schools—from Parsons School of Design in New York City to Central Saint Martins in London—are including sustainability in their curricula. French fashion school ESMOD has launched a programme in its Berlin campus entirely dedicated to sustainable fashion.

Furthermore, the past decade has seen a growth in the numbers of fashion brands that have ethical and environmental concerns at the core of their DNA. More and more consumers care about where their products come from, and sustainability is a crucial factor in deciding which brands they buy from. Several initiatives, for example MADE-BY, Fashion Footprint and Positive Luxury, seek to highlight companies and brands that 'do good'. However 'ethical fashion' still accounts for a marginal market share overall.[12]

In April 2014, the fashion industry came together for the Copenhagen Fashion Summit held under the patronage of HRH Crown Princess Mary of Denmark, which stands at the largest sustainability event in the industry to date.

Meanwhile, high-end consumers are experiencing a growing fatigue with the 'run-of-the-mill' luxury fashion goods and are increasingly on the lookout for unique pieces that underscore their individuality and tell a positive and compelling story that reflects their values.

To quote Vanessa Friedman, fashion director and chief fashion critic of the New York Times, '…the battle for consumers isn't just about making new stuff, but a battle for hearts and minds. It's not enough to just open gorgeous new stores in emerging markets; you have to demonstrate, publicly and meaningfully, a commitment to a value system too'.

Today, luxury and premium fashion brands have a unique opportunity to embrace sustainability as an antidote to the 'fast fashion' model. Buying less and buying better, as British fashion designer Vivienne Westwood professed, should become the motto for twenty-first century fashion.

---

[12]Ditty, S. (2013) *The SOURCE Summit report 2013*, Ethical Fashion Forum http://www.ethicalfashionforum.com Accessed 13 September 2015.

Overcoming the Birkenstock Syndrome

When it comes to fashion, sustainability has an image problem. As a recent article in *The Guardian* argued, 'the essential idea of sustainability—that we must endure, perpetuate, hold on to the past and drag it into the future—is about as exciting as watching lettuce wilt under the midday sun'.[13] And it seems that the fashion industry got the same memo that sustainability means boring.

This perception may have something to do with the beginnings of sustainable fashion. To quote Sandy Black, the author of *Eco-Chic: The Fashion Paradox*, 'Environmentalism is still associated with the 'new age' look of the 1990s, with natural hemp and wooden love beads, or with the traveller trends of dreadlocks, combat gear and Peruvian sweaters'.[14]

This is what has become known as the 'Birkenstock syndrome': the comfortable sandal favoured by hippies and eco-warriors. They could well be the best shoes for your feet, but they were shunned by fashionistas for years due to their perceived 'ugliness'. The same perception has plagued sustainable fashion for years: yes the clothes may be fair trade, organic and ethical, but they did not quite live up to the industry's high aesthetic standard.

As Olivia Wilde, the face of H&M's Conscious collection, told WWD in a recent interview, 'Sustainability has got a bad reputation, especially in fashion. I think people assume the clothes will be dull, the fabrics uncomfortable and the design uninspiring. It's like people think sustainability is a penance. This couldn't be further from the truth, and the H&M Conscious Exclusive collection shows that sustainability is no compromise on style'.[15]

> **Box: The Journey of Birkenstocks (Adapted from the New Yorker Article Sole Cycle by Rebecca Mead)[16]**
>
> *Birkenstocks have come a long way from a niche German brand to a global fashion phenomenon. The Birkenstock company traces its roots to 1774, when Johann Adam Birkenstock registered in Langen-Bergheim, a town outside Frankfurt, as a shoemaker. At the turn of the twentieth century, a descendant named Konrad Birkenstock brought major innovation to the business: industrially produced shoes with insoles that were contoured to fit and support the foot, earning the company's reputation as an orthopedic authority. The company's first sandal, called the Madrid, was conceived with*

---

[13]Visser, W. (2013) 'The sustainability movement faces extinction—what could save it?', *Guardian Sustainable Business*, 30 September 2013, http://www.theguardian.com/sustainable-business/sustainability-movement-faces-extinction, accessed 21 October 2015.

[14]Black, S. (2008) Eco-chic: The Fashion Paradox (London, UK: Black Dog Publishing).

[15]Diderich, J. (2015) 'Olivia Wilde Fronts H&M's Conscious Exclusive Ad Campaign', *WWD*, 16 March 2015, http://wwd.com/media-news/fashion-memopad/olivia-wilde-fronts-hms-conscious-exclusive-ad-campaign-10096395/, accessed 1 November 2015.

[16]Mead, R. (2015) 'Sole Cycle', The New Yorker Magazine, 23 March 2015.

exercise rather than fashion in mind: the shoe was supposed to feel as if it would fall off unless the wearer constantly gripped the contoured toe bar, toning the calf muscle in the process.

Birkenstocks' global expansion would not have been possible without Margot Fraser, a German dressmaker living in the United States. In 1966, on a trip back to Germany, she bought a pair of Madrid sandals to help with her foot pain. She introduced the sandal to the American market, initially selling them through health food stores. A transatlantic leap has been achieved.

Since then, Birkenstocks have been in and out of fashion. In 1990, Kate Moss was photographed wearing a pair of Birkenstock sandals and Marc Jacobs used them for his 1992 grunge collection. And in 2012, the sandals—this time lined with fur—made a surprise comeback thanks to Phoebe Philo, Céline's creative director. Her 'Furkenstocks' became a hot item, and those previously berating them suddenly found themselves snapping up a pair. Even Vogue *paid homage to the sandal in its article "Pretty Ugly: Why* Vogue *Girls Have Fallen for Birkenstock."*

Sustainable fashion has come a long way since its early days of shapeless hemp jumpers and itchy woolly socks. Today, it is a vibrant, diverse and truly international movement. It is predominately oriented towards women at a mid-point market and offers anything from fair trade basics to exquisite eco-luxe creations.

However, in the eyes of consumers, sustainable fashion is still lagging behind. Some luxury consumers, for instance, believe that achieving sustainability means compromising product quality. British fashion designer Stella McCartney, who is well known for her no-fur, no-leather stance, has admitted in a recent interview with *Business of Fashion* that there are still limited non-leather materials suitable for making high-fashion accessories.[17]

To prove that sustainability can be glamorous, Livia Firth, the wife of the Oscar-winning British actor Colin Firth, has launched the Green Carpet Challenge (GCC), which may have done more to raise awareness and improve the image of sustainable luxury fashion than any other initiative. It was thanks to GCC that mainstream designers such as Tom Ford and Victoria Beckham first dabbled in sustainability, while celebrities such as *The Devil Wears Prada* star Meryl Streep wore eco-creations on the red carpet for the first time.

There is also a rediscovery of artisanal traditions ranging from British lace and needlework exemplified in the Duchess of Cambridge's wedding dress by Sarah Burton for Alexander McQueen to Masai beading used in accessories by leading fashion brands including Vivienne Westwood through the UN-backed Ethical

---

[17]Amed, I. (2015) 'Stella McCartney: Change Agent', Business of Fashion, 29 March 2015, www.businessoffashion.com/community/voices/discussions/can-fashion-industry-become-sustainable/stella-mccartney-change-agent, accessed 26 June 2015.

Fashion Initiative. Some brands are already focusing on the revival of artisanal traditions in their collections.

Artisanal skills from around the world are in an increasingly high demand, and inter-generational knowledge transfer is something that luxury brands are well positioned to foster. For example, Hermès Foundation supports projects that promote transmission of skills and know-how ranging from sericulture (the production of silk) to tapestry.

Another promising development in recent years is the emergence of the so-called aspirationals, people who are image conscious but also care about the impact of their purchasing decisions on the environment. They represent one-third of the market, and this is not a number to be trifled with.[18]

As for luxury buyers, their views and actions with regard to sustainable development are highly polarized.[19] However, looking at the statistics from a glass-half-full perspective, one could argue that 49 versus 37 % are already actively engaged in sustainability issues with an additional 14 % primed to do so in the near future. Another ongoing study indicates that Millennials in particular view sustainability as a 'hygiene' factor for luxury brands.

Putting Glam into Green: Luxury Fashion's Sustainable Future

For a small, yet growing, number of thought leaders and game changers within and outside the industry, sustainable luxury is *the* opportunity.

The US-based brand Maiyet, which takes its name from the Egyptian goddess of harmony, searches the world for the unique materials and craftsmanship for its clothes and accessories. In partnership with Nest, an independent non-profit organization, Maiyet is working on training and developing artisan businesses. To show how fashion can be both glam and green, Maiyet uses celebrities like Daria Werbowy and the Slumdog millionaire star Frieda Pinto as brand ambassadors.

Kering is the world's third largest luxury group after LVMH and Richemont, with combined annual sales of over US$10 billion. In 2013, Kering pioneered a group-wide Environmental Profit & Loss Account (EP&L), which values the environmental impacts of a business, across its entire supply chain. Expressing the scale of impacts in monetary terms, it enables companies to consider environmental impacts alongside conventional business costs and place sustainability at the core of business decisions.[20]

---

[18]BBMG, GlobeScan, SustainAbility (2012) Re:Thinking Consumption: Consumers and the Future of Sustainability http://www.globescan.com/component/edocman/?task=document. viewdoc&id=51&Itemid=0, accessed 3 September 2015.

[19]Kapferer and Michaut-Denizeau (2013) 'Is luxury compatible with sustainability? Luxury consumers' viewpoint', Journal of Brand Management, 1 November 2013: 1–22.

[20]Kering (2015) *Kering Environmental Profit & Loss: Methodology and 2013 Group Results* (Paris, France: Kering).

The move is part of Kering's broader sustainability strategy, which includes ambitious targets for eliminating harmful chemicals from production, auditing suppliers, offsetting CO_2 emissions and reducing waste. Thanks to these actions, Kering has been recognized as an industry leader in the 2015 Dow Jones Sustainability Indices (DJSI) World and Europe, heading up the Textiles, Apparel & Luxury Goods sector for the second consecutive year.

One of Kering's most successful brands is Stella McCartney. A life-long vegan and animal rights activist, Stella McCartney, has established herself as a leading name in the fashion industry and an advocate for cruelty-free fashion. She is famous for not using any animal leather or fur in her creations and has supported numerous environmental causes over the years, all the while making a profound impact on fashion for years to come. Stella McCartney remains to this day the only sizeable sustainable luxury brand with annual revenue around $200 million and presence in 70 countries (including 30 directly operated stores).

The majority of sustainability decisions are made at the design stage, with designers influencing up to 80 % of a product's environmental impact. Honest By was founded by Belgian designer Bruno Pieters who started out at Hugo Boss but was soon outraged by the luxury fashion's high mark-ups, up to 6000 % of the real cost of garments. So, he founded Honest By, which is the first luxury fashion brand to guarantee full price transparency. On Honest By website, one can find a detailed list of all the costs—from the in-soles of the shoes to the wages paid to the workers —that make up the brand's truly honest price.

Scandinavia is a region that has recently made its mark on the fashion scene— from H&M, world's second-biggest fashion retailer, to many more globally successful designer brands such as Acne Studios and By Malene Birger. Many Nordic countries look to sustainable fashion as the region's USP. After the new Nordic cuisine took the world by storm, could now be the turn for the new Nordic fashion?

According to the General Secretary of the Nordic Council of Ministers, Dagfinn Høybråten, 'If we can lead the way in the Nordic countries when it comes to sustainable thinking in design and fashion, we will have a competitive advantage from it, besides the fact that we are contributing to a better world'.[21]

> **Box: NICE Fashion Code**[22]
> *Nordic Initiative Clean & Ethical (NICE) is a project led by the Danish Fashion Institute (DAFI) in collaboration with DAFI's sister organization, Nordic Fashion Association. Initiated in 2008, NICE has the goal of motivating and assisting fashion companies in their efforts to implement sustainable business practices. Organized by DAFI, the Copenhagen Fashion Summit serves as the world's largest biennial sustainable fashion conference*

---

[21]Norden.org (2014) 'New Nordic fashion on show', 31 July 2014, http://www.norden.org/en/news-and-events/news/new-nordic-fashion-on-show, accessed 31 October 2015.

[22]Nordic Fashion Association (2015) http://nordicfashionassociation.com/nice, accessed 31 October 2015.

with participants consisting international industry professionals, politicians, sustainable experts and NGOs.

The NICE 10-Year Plan is a collaborative effort between the five Nordic countries (Denmark, Finland, Iceland, Norway and Sweden) to create and promote a sustainable and ethical Nordic fashion industry. The collaborative effort aligns the intentions of the Nordic countries, thereby generating a common vision and common actions towards sustainable practices. The initial plan examines five critical areas in need of advancement: labour and ethics, water, chemical and dyes, carbon dioxide emissions and waste.

In 2012, DAFI developed a NICE Code of Conduct and Manual used as a guide for the fashion and textile sector to ensure effective implementation of various sustainability programmes with a view to promoting higher levels of sustainability performance across the industry. The NICE Code of Conduct and Manual is built upon the UN Global Compact's Ten Principles, thus striving for alignment with international standards and universal principles, and provides additional specificity from a sectoral perspective.

To further spread awareness and dialogue of sustainable fashion, NICE also developed Nicefashion.org, an online forum for consumers, designers and textile companies to share resources and information. The aim of Nicefashion.org is to transform the supply chain by inspiring industry professionals to design and supply ethically, while simultaneously informing consumers on the proper care of garments and the benefit of prolonged use of items.

Questions for Discussion:

- How do you think the industry and consumers can work together to promote sustainable fashion? What should be their respective roles?
- Why do you think Nordic countries believe sustainable fashion presents a competitive advantage for their region? What opportunities do you see in your country or region for making the case for sustainable fashion from a business perspective?
- Do you think the fashion industry needs tighter regulations at the international level? If yes, who should take the lead in developing these? If not, why?

Today, we are on the cusp of a major transition towards a more responsible fashion industry—from high street to haute couture. According to model Lily Cole, who embraced sustainable fashion early on, and has since launched impossible.com, an online shop selling ethically produced clothes and accessories, '….ethics seems to have become the new fashion trend. Who had heard of organic food ten years ago, let alone organic or fair trade clothing three years ago? These are important changes as we begin to recognize and appreciate the scale to which the small things we do produce consequences on a larger scale'.

However, in order to achieve that transition, several shifts need to occur within and outside the luxury fashion sector.

First, in order to shift consumers' attitudes towards sustainable luxury fashion, sustainability should be a unique selling point (USP), but not *the* USP—because high-end fashion is, first and foremost, an expression of personal style and an aesthetic choice. Brands simply touting their eco-credentials are likely to remain a niche offering for the 'green' consumer—the so-called 'Waitrose 10 %'.

Second, technology is the next frontier for sustainability, which has the potential to minimize negative impacts, unleash creativity and provide added benefits to the consumer. At the same time, technological innovation must go hand-in-hand with preservation of unique skills and traditional know-how, which will continue to be an essential attribute of luxury. The recent collaboration between Apple and Hermès to create a high-end iWatch is a good illustration of how technology and craftsmanship can go together.

Third, to achieve a step change, industry and sustainability professionals must learn from each other—and keep an open mind. Companies must learn from sustainability professionals how to 'close the loop' in their operations and become more. The recent multi-stakeholder effort to define and measure the so-called 'natural capital' in a range of sectors, notably apparel, is a good step forward in this regard. And vice versa, sustainable brands must greatly improve their business skills to ensure their economic viability. 'Until sustainable designers learn to think about business in the same way their non-sustainable competitors do, they'll lose, even to inferior products', writes Carmel Hagan.

Fourth, luxury fashion brands must look beyond the product by offering a vision of a more sustainable lifestyle. To quote *Business of Fashion* Founder Editor-in-Chief Imran Amed, '…in order to thrive, fashion brands must think deeply about how they engage with consumers and provide experiences and fulfillment that goes beyond glossy, marketing-driven aspiration. Fashion is now competing with other sectors, whose products bring meaning and joy to the lives of consumers. Yet another reason to reconsider the formulaic fashion business model'. One such example is Goop, an online platform launched by actress-turned-lifestyle guru Gwyneth Paltrow, which blends Hollywood glamour with healthy living tips.[23]

---

[23]Amed, I. (2015) 'A Reality Check for Fashion's Status Quo', *Business of Fashion*, 29 May 2015, http://www.businessoffashion.com/articles/week-in-review/a-reality-check-for-fashions-status-quo, accessed 31 October 2015.

Finally, the big question—debated at the 1.618 Sustainable Luxury Conference in Paris—is whether sustainability is merely a response to outside pressure or a driver of creativity and innovation. For the author, it is definitely the latter. By embracing sustainability as a business opportunity, luxury companies can change the often prevalent 'scarcity thinking' into a 'blue ocean' strategy by unlocking new markets and sources of growth.

Questions for Discussion:

– Why do you think people across cultures and generations are attracted to luxury? Are their attitudes towards luxury changing? If so, how?
– In your view, where would sustainability action be more impactful: at the mass market, 'fast fashion' level or in high-end fashion segment?
– How do you think communications professionals can help promote the idea of green-and-glam fashion? How can one avoid the pitfalls of 'greenwashing'?

Chapter Summary

Introduction: *Luxury and sustainability—from strange bedfellows to natural allies?*

– The concepts of luxury and sustainability and their compatibility
– Key sustainability considerations for luxury brands
– Sustainability as a key trend shaping the luxury industry

Of furs and feathers—nature and high fashion through the years

– The evolution of fashion's relationship with nature
– Nature as the source of luxury fashion's appeal and profits
– Fashion innovation coming from nature

The rise—and fall?—of 'fast fashion'

– 'Fast fashion' phenomenon and its social, economic and environmental impacts
– Ongoing efforts towards a more responsible fashion industry
– Opportunity for luxury fashion brands to embrace sustainability as an antidote to 'fast fashion' model

Overcoming the 'Birkenstock syndrome'

– The beginnings of sustainable fashion: Birkenstocks and itchy socks
– Consumer perceptions of sustainable fashion: still lagging behind

Putting glam into green: luxury fashion's sustainable future

– The role of responsible leaders in sustainable luxury
– Examples of fashion brands that blend style and sustainability
– Key success factors for sustainable luxury fashion brands

Global Warming Calls for an Inner Climate Change: The Transformative Power of Worldview Reflection for Sustainability

13

Annick de Witt

Abstract

As an opening case, this chapter begins with the author's personal exploration of spirituality and sustainability. It stems from a nature experience she had in the Himalayan Mountains in Nepal, which altered her worldview and her sense of self, sparking an existential inquiry and shaping her quest for learning. Ultimately, this experience led her to investigate the main *worldviews* as present in the contemporary West, as well as their distinct relations with our environmental challenges. Building forth on her body of work in this field, this chapter discusses the dynamic evolution of the *traditional, modern*, and *postmodern* worldviews, thereby offering a larger, cultural-historical context to the newly emerging *integrative* worldview. Some authors have argued that this latter worldview may have particular potential for addressing global challenges such as climate change. By discussing its context of emergence, this chapter highlights the potential role of this worldview in addressing our sustainability issues. More fundamentally, the chapter aims to inspire curiosity to learn more about one's own as well as others' worldviews, as reflexivity, compassionate understanding, skillful communication, and creative collaboration are essential skills for addressing our complex, global challenges.

A. de Witt (✉)
Delft University of Technology, Delft, The Netherlands
e-mail: A.deWitt@tudelft.nl

My Personal Journey into Spirituality and Sustainability

One day, on a trek through the Himalaya Mountains in Nepal, I was struck by the obvious. After days of hiking, breathing in the fresh mountain air, continuously facing these towering, snow-capped peaks, and getting "high" on the altitude, I found myself being amazed. I could hardly believe my eyes. I blinked. I checked myself. More amazement. Fascinated with what I saw, I eagerly started to look around. It was everywhere. Pervaded everything. What was it? How was it possible that I never saw this before?

Colors seemed to be brighter and shapes livelier. Everything felt so close and real, so intimate. It was almost as if the rocks and the trees were breathing—they were brimming with aliveness! I had the feeling that I could see, really see, for the first time in my life. My perception was immediate, not hampered by consuming thoughts or the gnawing sense of separation that normally characterized my experience. I just saw what was there, and that was, in its shape and structure, not any different from how I normally experienced it. A tree was still a tree, and the sky was still above my head and the soil under my feet.

Yet everything seemed to be permeated with a sense of presence, of aliveness. The trees and the stones and the mountains and the rocks and the river were all present, firmly grounded in the truth of existence. Being! It suddenly dawned on me that this was what the mystics had been talking about for ages. This presence gave everything a beauty, a radiant shine, an inherent value and meaning. I felt ecstatic, and oh so alive—alive in the middle of a luminous reality that I was intimately part and parcel of.

I had the above experience almost twenty years ago, and although I did not know it at the time, in a way it was the starting point of my personal exploration into the relationship between "spirituality and sustainable development"—the theme of this book, and a central inquiry in the line of research and work I have been engaged with over the last 10+ years.

I grew up as a child in the 80s, and I was aware of the problematic state of the environment. My brother and I started an environmental "organization" called "RDW"—the in our young ears hip-sounding acronym for "Safe The World" (in Dutch "Red De Wereld"). We raised money to save the baby ducks in a nearby pond in our village, because, since there was no adequate gauze, the poor ones tended to fall in the drain. Although my parents were not particularly involved with the environment, my grandmother was a nature guide, and we were taken for hikes in the woods every Sunday. In some way, nature became my church. I only found that out much later though.

I was raised in an atheistic family, without any sense of higher meaning or deeper purpose. You could say that I grew up in a disenchanted universe, to use Max Weber's famous term. A sense of meaninglessness and a deeply felt lack of value pervaded not only my world but also my sense of self. It left me with a hunger for another world, and another self. So quite early on, I became a "spiritual

seeker." Somehow the secular, and in many ways materialistic, worldview of my parents appeared to be deeply unsatisfying.

Experiencing altered states of consciousness, as described in the nature experience above, sparked a profoundly existential inquiry, concerned as I became with the big questions of life: What is life all about? Who am I? What is my place and purpose in existence? What will truly fulfill me? How should I live? How can I be of service? Now I identify these questions as worldview-questions, as their answers give direction to one's understanding and experience of life and reality at large.

The state of the earth really alarmed me, so I started a college degree in "social environmental studies." While we learned everything from environmental law to environmental sociology, it struck me how little emphasis there was on the interior dimensions of environmental challenges. Worldviews, values, and culture seemed seriously underrepresented in our curriculum. A course in environmental philosophy was a major exception, and it became a key inspiration for my thinking: it made me connect my own existential inquiries and spiritual search with the societal quest for a more sustainable society. Reading Ken Wilber's "Sex, Ecology, Spirituality" opened up my universe further, as he seemed to explain and articulate a vision that resonated with intuitions that had been brewing in my being for years.

After completing my Master's thesis, I started working for an environmental organization. We developed many interesting projects using art, media, and film to inspire the public to connect with nature, and to care about sustainability. We also did little research projects, organized symposia, wrote op-ed pieces, and influenced national policy. However, as fascinating and diverse as this job was, it did not satisfy my quest to understand how on earth it was possible that our society seemed to be on a clear trajectory to destroy the very conditions our existence depended on—from polluting the air we breathed to destroying the soil we grew our food on. This was a riddle that needed an answer.

And so I started working on a doctoral dissertation, inquiring into the relationship between people's worldviews and their engagement with sustainability issues. My research was built upon the intuition that how we view nature, the world, and ourselves will play a decisive role in how we will treat our world. My deep conviction was that, in order to adequately respond to our urgent environmental issues, a new worldview was not only necessary, but was already emerging, gradually, and particularly in some of the more progressive corners of the world.

This worldview honored the sacredness of nature (and of all of life), but was simultaneously grounded in a rational sensibility and an appreciation of the many "fruits of modernity," like science and technology. I was convinced that, as many brilliant philosophers and thinkers had argued, we indeed needed some kind of re-enchantment of our worldview, a recognition of an intrinsically valuable and spiritually meaningful dimension to all of life, just as I had seen it so clearly on that bright day in the Himalaya's.

> **Case Reflection Questions**
>
> 1. How do you see the relationship between spirituality and sustainability? Are they vitally interlinked? Do you think that we need to understand the spiritual basis of existence in order to be sustainable? Why or why not?
> 2. Do you think that it matters how we view nature, the world, and ourselves? In your view, do worldviews play an important role in securing a sustainable future? Why or why not?
> 3. Take a moment to close your eyes and think back of experiences in your own life, perhaps in nature, or with a loved one, that were so profound and meaningful that they changed how you see and understand life. Can you describe one such experience, and articulate how (and perhaps why) it changed your understanding of the world, yourself, and life?

Introduction

Our world is in dire need of profound change. Our global society is under intense pressure, on many fronts: from collapsing ecosystems and the increasing threat of climate change to sociopolitical tensions and polarization; from poverty, wars, and terrorism, to challenges to food, water, and energy security; and from growing streams of refugees to financial systems that thrive on perverse incentives. Many of these issues are intertwined with each other in complex ways, and some authors therefore argue for addressing these multiple crises as a whole, as a "poly-crisis," to use philosopher Roy Bhaskar's term.[1]

Reflecting on what a sustainable world could possibly look like, some authors have argued that "this is not a world achieved solely by technological measures. … it is a world with more humanness, fairness, and awareness, as well as less focus on consumption."[2] Other authors argue that addressing this poly-crisis demands a change in consciousness and culture, rather than exclusively focusing on technological fixes and institutional changes.[3] That is to say that as much as we need technological, economical, political, and behavioral changes in order to address our world's problems, we also need changes *within*—changes in the hearts and minds of people and changes in how we relate to ourselves, each other, and nature. That is, effective climate policy also requires an "inner climate change." As British climate scientist Mike Hulme

---

[1]Bhaskar et al. (2015).

[2]Ericson et al. (2014, p. 74).

[3]e.g., Hedlund-de Witt (2013b), Hulme (2009), O' Brien (2010), and Wilber (1995).

argues in his popular book "*Why we disagree about climate change*," discussions about climate change are discussion about ourselves—about our dreams, our fears, our assumptions, and our identity—that is, about our *worldviews*.[4]

Worldviews can be defined as "the inescapable, overarching systems of meaning and meaning-making that inform how humans interpret, enact, and co-create reality."[5] They are the fundamental "lenses" through which humans see and filter life and the world, and they interface with people's perceptions of global issues like climate change in ways that are profound, persistent, and frequently overlooked. Worldviews not only tend to shape how individuals perceive particular issues and their potential solutions, but they also tend to influence their willingness to partake in, or politically support, such solutions. Moreover, the controversy surrounding a global sustainability issue like climate change—whether it is exacerbated by human beings or not, what its potential solutions are (e.g., think of controversial technologies like nuclear energy and genetic modification of crops)—makes clear how different worldviews in this discussion tend to clash with each other[6]. Obviously, this makes undertaking effective international action difficult.

In the context of generating support for the sweeping policy and lifestyle changes needed for addressing global sustainability issues, "mapping" these worldviews and how they interface with issues such as climate change has become essential. Additionally, reflecting on our own worldview as well as on the worldviews present in our cultural landscape can be seen as a spiritual practice in itself. In essence, it is taking the time to reflect on the assumptions and beliefs we hold, where these ideas come from, and what kind of experience that is generating for us. Generally speaking, it fosters a more aware and reflective attitude, both of our inner experience and those of others. This is not only important for our own learning and development, but also for our skills in communication, collaboration, and strategy.

Moreover, understanding the cultural worldviews present in society helps us appreciate the larger context of the newly emerging *integrative worldview*, which, in its attempts to reconcile rational thought and science with a spiritual sense of awe for the cosmos, has according to some authors a vital role to play in addressing our environmental challenges.[7] In this chapter, I will therefore explore the role and potential of this worldview in addressing our global sustainability issues, by discussing its historical–cultural context of dynamically evolving worldviews and their distinct relations with our environmental challenges.

This discussion is largely based on my earlier published, peer-reviewed work on worldviews and sustainability and summarizes some of the main insights coming forth through this body of research, so please see referenced articles for more nuance and empirical support. It is also good to know that when I refer to traditional, modern, postmodern, and integrative worldviews, I use these concepts as

---

[4]Hulme (2009).

[5]Hedlund-de Witt (2013b, p. 156).

[6]De Witt (2015).

[7]See, e.g., Esbjörn-Hargens and Zimmerman (2009), Hedlund-de Witt (2014), Laszlo (2006), O' Brien (2010), Van Egmond and De Vries (2011), and Wilber (1995).

ideal types. That is to say that these are rationally and logically constructed ("ideal" or "pure") types that serve one to investigate and analyze phenomena in the real world, which are always more complex and "messy" than such types describe them to be. For example, in reality, most people will not perfectly fit in one category of worldview, but may display a combination of two main worldviews. However, despite these shortcomings, these ideal types are helpful in providing a general overview of the primary assumptions, themes, and concerns of substantial groups in (Western) society.

The Modern Worldview, Disenchantment, and Climate Change

Since particularly the 1960s, environmental philosophers have argued that environmental issues are more than just the accidental "waste products" of our industrial–technological civilization. Instead, they tend to see these issues as *symptoms* of a much deeper crisis, with the Western, modern worldview often being appointed as the main cause, or "root," of this crisis.[8]

The typically modern, instrumental relationship with nature—in which, for example, a tree is no longer a living being with a certain degree of existential rights and purpose, but an object for exploitation and commodification—is often seen as the basic attitude from which all our abuse of the environment springs. In this worldview, man, in the words of Martin Heidegger, has become the "measure of all things." The natural environment, according to Max Weber, has been "disenchanted"—its magic and value traded for functionalism and manageability.

According to this worldview, only that which is empirically perceptible has genuine validity. Internal phenomena are reduced to their external equivalents. Consciousness, for example, is a by-product, or "epiphenomenon," of the brains, and the experience of love is attributed to chemical processes, rather than being understood as an intrinsic human potential or virtue to be cultivated. This materialistic interpretation of the world has yielded vast insight into the mechanisms of the physical universe, but simultaneously tends to devalue the world into an object. Nature, in this view, is not only "value-free" but also without real, intrinsic value ("valueless" or "worthless").

This concept of reality results in a fundamental separation between humanity and nature, mind and body, and subject and object. In a world in which matter is the ultimate reality, everything is fundamentally separated: Physical boundaries are insurmountable. The rational, conscious human being stands diametrically opposed to irrational, unconscious nature. The body is reduced to being a vehicle for the mind, rather than having its own intelligence and wisdom. And facts are utterly separate from values.

---

[8]See, e.g., Devall and Sessions (1985), Naess (1989), Plumwood (1993), Wilber (1995), and Zweers (2000).

This worldview tends to result in the modern, Western individual often feeling estranged and removed from nature—and not just from the nature around him, but also from the nature within himself. As the German philosopher Jürgen Habermas put it, "the permanent sign of Enlightenment is dominance over an objectified external nature and a repressed internal nature."[9] This condition thereby creates the characteristic state of *alienation*, disconnection, and disorientation that many individuals in the modern world experience.[10]

That this worldview has a bearing on climate change needs hardly be argued. A worldview that denies interiority necessarily produces an exteriorized culture. From such a materialistic philosophy of life, the quest for happiness can hardly lead anywhere else but the shopping mall. And precisely this incessant consumption culture is difficult to reconcile with a responsible treatment of the environment.

Empirical research of colleagues and myself has shown that the modern worldview has indeed a problematic relationship with sustainability issues. We found it to be linked to an attitude of "technological optimism" (the idea that science and technology are going to solve environmental problems, almost as if by themselves), to a more instrumental attitude toward nature, and to considerably less sustainable lifestyles. For example, people with a modern worldview tended to eat significantly more meat than people identifying with other worldviews, and they were less inclined to prioritize sustainability concerns in their voting behavior.[11] In terms of actual change, both of these behaviors are of substantial importance. Although this is problematic for addressing an issue like climate change, we should not forget the numerous advances this worldview has also brought.

Dynamics of Changing Worldviews: From Traditional to Modern to Postmodern

As Ken Wilber says, "every worldview has both its dignity and its disaster." That is, every worldview emerges in response to a certain set of life conditions, thereby bringing forth its own, unique qualities and solutions, as well as creating new problems or pathologies. Habermas speaks in this context of the *dialectics of progress*, emphasizing how "evolutionary important innovations mean not only a new level of learning but a new problem situation as well, that is, a new category of burdens that accompany the new social formation. The dialectics of progress can be seen in the fact that with the acquisition of problem-solving abilities new problem situations come to consciousness."[12]

Every new worldview builds forth on the achievements of previous worldviews, launching itself from the status quo as created by the former worldview. For example, the modern, enlightened worldview arose in response to the problems and

---

[9]Habermas (1987/2000, p. 110).

[10]Spretnak (1999) and Taylor (1989).

[11]De Witt et al. (2016) and Hedlund-de Witt et al. (2014).

[12]Habermas (1976, p. 164).

limitations of the traditional worldview. While the traditional worldview upholds great values such as family life, social order, lawful authority, self-sacrifice, humility, and the sanctity of their (generally religious) beliefs, it did not allow much space for critical thinking, scientific reasoning, individual ingenuity, and personal achievement. As many sociologists would argue, the modern worldview in that sense liberated humans from the oppression of the imposed, frequently traditionally religious, frameworks and roles of the past, creating a society based on scientific thinking and technical–bureaucratic rationality. This resulted in a considerably greater degree of freedom for, and recognition of, the dignity of the individual and a vast increase in both quantity and quality of the average life in the West.

Thus, while modernism's great achievements are everywhere in our lives—from health to education and from safety to technology—its progress has come with significant problems, environmental degradation being one of the more severe ones.[13] And it was precisely in response to these typically modern "evils" that postmodern worldviews started to formulate answers of a radically different nature. That is, as Mcintosh[14] puts it, "when people try to improve their conditions they often end up improving their definition of improvement itself." Or, to put it in other words, not only do certain qualities increase or decrease, the criteria by which these qualities are evaluated change, and that is what makes for a qualitative or structural change.

With the emergence of the postmodern worldview since particularly the 1960s, in academia, art, and ultimately in culture as a whole, the modern worldview was "under attack." Postmodern philosophers maintained, for example, that the modern worldview could not uphold its claims. They argued that the objectivity modern science propagated was impossible both in principle and in practice: Not only can we not hold ourselves separate from a reality we are in the midst of (and thus are continuously shaping as well as being shaped by), the practice of science is guided by subjective choices and interests, every step on the way. Thus, while the modern worldview tends to see its own perspective as a more or less objective representation of reality ("based on the facts of modern science"), the postmodern worldview problematizes such an, in its eyes simplistic, perspective and emphasizes how our experience is governed to a great degree by our conceptions and narratives of reality.[15]

According to this view, the claim of objectivity was not only impossible, but also deceptive—a political act that empowered certain groups, while disempowering others. Rather than being objective and neutral, according to this view, knowledge is contextual, relative, and subjective and has substantial implications in terms of power and politics (think of Foucault's "knowledge is power"). The "deconstruction of dominant narratives"[16] therefore became a revolutionary act and the

---

[13]McIntosh et al. (2013).

[14]McIntosh (2015, p. 10).

[15]In fact, the concept of worldview itself can be argued to be a postmodern invention (Hedlund-de Witt 2013b).

[16]Lyotard (1984) famously defined postmodern as "incredulity towards metanarratives" (p. xxiv).

emancipation of "marginalized voices," such as those of women, minorities, and nature, a central motivation. In antithesis to the culture it arose from, postmodernism emphasizes values such as pluralism, uniqueness, relativism, indeterminacy, egalitarianism, and skepticism.

Culturally, we see the emergence of these ideas in the rise of a range of social movements since the 1960s, such as the peace, women's, and environmental movements. Generally, people were increasingly dissatisfied with the materialist and reductionist values of the modern worldview. As the global *World Values Survey* research[17] demonstrates, when a certain degree of welfare is achieved, a shift from material to "postmaterial" or "self-expression" values tends to occur. This shift changes the emphasis from modern values such as achievement, hedonism, status, and recognition, to postmodern values such as autonomy, creativity, authenticity, imagination, and feeling. Generally speaking, it is a transition from a focus on welfare to well-being and from quantity to quality. In the words of Inglehart and Welzel:

> Industrialization gives humans increasing control over their environment, diminishing their deference to supernatural powers and encouraging the rise of secular-rational values. But industrialization does not nourish a sense of human autonomy or lead people to question absolute authority, which persists in secular ideologies. By contrast, postindustrialization gives people a sense of human autonomy that leads them to question authority, dogmatism and hierarchies, whether religious or secular. And because survival comes to be taken for granted, people become increasingly critical of the risks of technology and appreciative of nature. Spiritual concerns about humanity's place in the universe regain prominence. This does not bring a return to dogmatic religiosity, but it does bring the emergence of new forms of spirituality and non-material concerns (2005, pp. 29–30).

So with the emergence of the postmodern worldview, we see a rise of what are sometimes called "soft values." People gain a different perspective on nature, show profound concern for the environment, and open up to new, more contemporary forms of spirituality and meaning-making. The postmodern worldview thus brought forth many new advances and absolutely crucial developments. However, as every worldview, it also created a new set of problems that just by its sheer existence started to call a new worldview into being.

The Challenges of Postmodernity and the Emergence of the Integrative Worldview

Because the postmodern worldview arose primarily in response to the shortcomings of the modern worldview, a distinct "anti-modern sentiment" can be discerned, which tends to puts it at odds with much of mainstream society. Its beautiful social and environmental concerns often tend to translate itself into a passionate attack on the status quo—guided by the firm belief that "almost about everything" in the

---

[17]The *World Values Survey* is the largest existing, worldwide, cross-cultural, longitudinal data set on (changes in) cultural beliefs, values, and worldviews. See www.worldvaluessurvey.org.

modern world is misguided. In that sense, this worldview can be a master of critique and skepticism, with an extra sensitive eye for power politics, money motivations, and hidden agendas. In its more problematic expression, the numerous advances that modernity has brought, are overlooked and taken for granted.

Since postmodernism (explicitly or implicitly) defines itself in stark opposition to modernity and rejects its central values, both modernists and traditionalists alike tend to experience it as threatening or simply unappealing. Also practically, this anti-modern sentiment tends to be antithetical to fostering constructive working relations with other worldview segments in society, thereby diminishing its capacity to inform, inspire, and cooperate with the people they most need in their attempts to create a more sustainable, just world for all.[18,19]

Postmodernism can be said to have "resurrected" the subjective dimensions of reality—the role of the human subject in constructing and narrating reality—making individuals more aware of the powerful impact of their thinking and cultural conceptions, thereby profoundly empowering them. However, simultaneously this development has tended to result in a negation (or deconstruction) of the more objective dimensions of reality. In some more extreme postmodern views, everything is seen as a product of human consciousness and imagination, and the existence of a real or objective world is altogether denied. This can lead to a debilitating relativism, nihilism, and even "anti-realism."[20,21] The postmodern worldview is also accused of resulting in a loss of meaning, direction, and purpose, because its intense fragmentation and its attack on overarching frameworks rob people of what they use to make sense of their lives morally and spiritually.[22]

So in response to some of these issues and shortcomings, we currently witness the emergence of a new worldview. This development is still more speculative and not as widely supported with empirical data and historical and cultural analyses as the existence of the traditional, modern, and postmodern worldviews. However, multiple authors are speaking of its emergence,[23] and my own research has quantitatively validated its existence in the Netherlands and the USA.[24]

---

[18]De Witt (2015), McIntosh et al. (2013), and Shellenberger and Nordhaus (2004).

[19]So while enivronmental concern is a major evolutionary achievement of the postmodern worldview, as long as this concern is associated with this unappealing worldview, it is not likely to support a transformation of society in a more ecological direction.

[20]Alvesson and Sköldberg (2009) and Butler (2002).

[21]This can also lead to particular problems for environmentalism, as the fragmentation, disorientation, and loss of overarching perspectives are threats to the efforts of those who are struggling to proselytize a global perspective on environmental destruction. Moreover, the complete "deconstruction" of nature is problematic for environmental discourse, since it undermines notions such as nature's intrinsic values, integrity, and autonomy.

[22]See, e.g., Spretnak (1999) and Taylor (1989).

[23]E.g., Benedikter and Molz (2011), Gidley (2007), Laszlo (2006), O' Brien (2010), Van Egmond and De Vries (2011), and Wilber (1995, 2001).

[24]De Witt et al. (2016).

This worldview is often referred to as an integral or integrative worldview, as it attempts to bring together and synthesize aspects or domains that in other world-views were understood to be mutually exclusive, such as science and spirituality, logic and imagination, object and subject, and ecology and economy. One of the great powers of this worldview is that it has the ability to see a larger, deeper, or higher-level unity in our world of duality and opposition, however not by reversing the process of differentiation (i.e., by negating the differences or opposition in favor of the whole), but by bringing together and integrating the polarized elements. In other words, it attempts to include a wide range of viewpoints, even if those viewpoints may be conflicting with each other, capturing the potential unity through the full recognition of its differences, inbuilt dialectics, and paradoxes.[25]

The Integrative Worldview and Its Potential in Addressing Our Global Sustainability Issues

In contrast to the postmodern worldview that it builds forth on, the integrative worldview does not have the need to negate the foundational forces and ideas upon which so much of our modern world is built, notably science and capitalism, while simultaneously being able to embrace and include what was repressed and ignored in this world—such as a more spiritual or meaningful understanding of life.

So while this worldview rests solidly on the foundations of modern science, particularly on the ideas of physical, biologic, cultural, and psychological evolution, it interprets the evolutionary process to have a spiritual significance and even purpose.[26] Thus, rather than creation and evolution being two mutually exclusive perspectives, this worldview brings them together, viewing evolution as a continuously creative act that we as humans participate in. According to this perspective, humans embody evolution's entire sequence of development, and this emergent structure is continuing to unfold in and through us.[27] Elsewhere, I refer to this understanding as an evolutionary, spiritual–unitive ontology[28] or a *spiritual–evolutionary cosmogony*—that is, an evolutionary understanding of the universe in which the process of evolution itself is driven by, or a manifestation of, a creative spirit or divine force, rather than a belief in either a biblical notion of creation or a purely scientific understanding of random, unconscious evolution.[29]

---

[25]Benedikter and Molz (2011).

[26]For a detailed argument on "the spirit of evolution," see, e.g., McIntosh (2015) and Wilber (1995).

[27]Protagonists of this perspective may argue that the process of biologic evolution is mirrored in our brain structure, where we find a reptile, mammal, and human brain, while our cultural evolution is reflected in the development of children, who are said to roughly recapitulate humanity's historical stages of consciousness as they grow (from magical, to mythical, to rational, and potentially beyond) (see, e.g., McIntosh 2015).

[28]Hedlund-de Witt (2014).

[29]Hedlund-de Witt (2013a).

This perspective re-enchants our world and nature, thereby overcoming the modern worldview's instrumentalization and alienation of nature, while not being coherent with fundamental theories, findings, and insights as generated by modern science. As multiple authors have argued, this spiritual sense of awe for the cosmos may result in a profound sense of care for the health and flourishing of our planet as a whole, which may turn out to be essential to addressing our sustainability issues.[30] Empirical research has indeed shown that people associated with the integrative worldview (and the same counts for the postmodern worldview) tend to show more concern for issues like climate change and generally have more sustainable life-styles, in comparison with people ascribing to more traditional and modern worldviews.[31] Moreover, by viewing knowledge as a product of a complex syn-thesis, recognizing that it is both (subjectively) constructed *and* based on the (ob-jective) reality of the world we experience and live in, this worldview overcomes postmodernity's debilitating relativism, nihilism, and anti-realism.[32]

Precisely because of its attempt at integration, this emergent cultural movement appears to be relatively compatible with other cultural currents in contemporary society. Therefore, notably in the context of the current widespread disagreement, polarization, and gridlock in the global debate around our global environmental issues, an important contribution of this movement may be that it offers an inte-grative perspective that may be able to 'speak to' and inspire a wide range of people with a diversity of worldviews. As I have argued elsewhere,[33] this worldview may therefore serve the important role of communication and mass mobilization for sustainable solutions.

A practical example of one of the ways in which this new worldview expresses itself is in the concept and practice of *social entrepreneurship*, which aims to create businesses that prioritize their social purpose, however without negating their need to be profitable.[34] In this way, this concept and ideal synthezies modernity's cre-ative, entrepreneurial spirit with postmodernity's concern for social and environ-mental values. Hurst (2014) speaks in this context of the emergence of the *purpose economy*, a new economic era driven by establishing purpose through serving needs greater than one's own, enabling personal growth, building community, and con-tributing to something bigger, such as the environment, world peace, health, hap-piness, and well-being. The emergence of such new, socially inspired businesses and business models may be a crucial impetus for the transformation to a more sustainable society. So new worldviews can lead to novel forms of social involvement and creative social change, as well as to new economic and

---

[30]E.g., Giner and Tábara (1999), Hedlund-de Witt (2013a, 2014), and Taylor (2010).

[31]De Witt et al. (2016).

[32]Intellectual movements such as integral theory and critical realism are engaged in the deep process of aiming to articulate a philosophy of science that responds to the epistemological questions of our (post-postmodern) times (e.g., Bhaskar et al. 2015; Esbjörn-Hargens and Wilber 2006).

[33]De Witt (2015), Hedlund-de Witt (2014).

[34]See, e.g., Hawken et al. (1999) and Mackey and Sisodia (2013).

organizational models.[35] This worldview may therefore offer an inspiring vision of a more sustainable society, in the form of novel ways of addressing environmental and sustainability issues.[36]

Conclusion: The Transformative Power of Worldview Reflection for Sustainability

Understanding the worldviews present in our contemporary society and contemplating our own worldview can support us to become more *reflexive*. That is, more aware of the beliefs and values that habitually drive our actions and decisions, often without us even knowing it. While being reflective refers to the quality of being able to stand back and take perspective, being reflexive means that we, as the Oxford English Dictionary puts it, "turn or reflect back *upon the mind itself*." That is, rather than that we merely take perspective on a certain situation, we reflect on our own attitudes, thought processes, values, assumptions, prejudices, and emotional reactions *in relation* to that situation. Cultivating such reflexivity can be seen as an important spiritual practice in itself.

Because reflexivity goes much deeper than mere reflection, it also has the potential to empower us in more profound ways. More aware of our worldview-commitments, a wider range of choices for action open up. This may result in more positive interactions and collaborations with others, more creative strategies for change, and more skillful communications. We may for example find that we are more successful in speaking to people with different views, rather than just appealing to those who tend to share our own views ("preaching to the choir"). As you can imagine, such skills are essential for addressing our complex, global challenges, which demand from us that we come together to communicate, negotiate, and collaborate, on a planetary level. Cultivating reflexivity may thus profoundly empower us as change-agents.

It is essential to keep in mind that more important than the content of any worldview is the *attitude* with which we relate to (our own and others') worldviews. As with any framework or knowledge we need to be aware we use it for its greatest good—to cultivate understanding, rather than put people into boxes, judge, or label them. This means that our inquiry into worldviews always needs to lead to more compassion for ourselves and others, so that we can work together to create a more sustainable and just world for all, while honoring and including a diversity of perspectives.

Summary

- We cannot understand and address our sustainability challenges apart from the cultural systems of meaning and meaning-making that guide people in their understanding of life and the world. In the words of Richard Tarnas,

---

[35]Laloux (2014).

[36]E.g., Brown (2012) and Esbjörn-Hargens and Zimmerman (2009).

"worldviews create worlds." This means that if we want to change anything in the world, we need to look at our worldviews.

- In this chapter we explore four main worldviews in the contemporary West, as distinguished by empirical research as well as sociological, cultural, and philosophical analyses. These are the traditional, modern, postmodern, and integrative worldviews.

- Every worldview arises in response to particular social, cultural, economic, and physical conditions, aiming to formulate new answers and solutions to the pressing challenges of the time. Generally, they thereby tend to also create new problems. Therefore, every worldview has its dignity and its disaster, its qualities and its shadows, its true progress and its shortcomings. These are the dynamics of cultural change and progress, or as Habermas has called it, "the dialectics of progress."

- Understanding this dialctical dynamic of changing worldviews gives us greater insight into the cultural dynamics and conflicts in society, thereby inviting more appreciation for the different worldviews' values and qualities, as well as compassion for their shortcomings. This empowers us to productively communicate and collaborate with people who think differently, which is an essential skill in addressing our global problems.

- On a more personal level, reflecting on and exploring our own worldview can be seen as a spiritual practice that supports our inner growth and facilitates a generally more reflective and conscious way of being and living in the world. From that place, we are better able to respond to the challenges of this time, and contribute to a more sustainable and fulfilling world for all.

Interactive discussion questions

1. Do you recognize these worldviews in your own life? What is the worldview you most identify with? How would you describe this worldview to others?

2. How did you come to that worldview? Is that the worldview you grew up with? Or is it a perspective you came to later in life, as a result of certain experiences or insights?

3. Why do you think it is important to have an understanding of both your own and others' worldviews?

4. Keep your exploration into your own and others' worldviews going! Take the worldview test as developed in empirical research at www.annickdewitt.com/worldviewtest. Also see if you can recognize the different worldviews in public debates, in discussions you may have with friends or family, and in your own thought processes. At all times remember: an attempt to understand and have compassion for other perspectives is the foundation of a better world for all.

References

Alvesson, M., Sköldberg, K. (2009). *Reflexive methodology*. New vistas for qualitative research (2nd ed.). London: Sage Publications Ltd.

Benedikter, R., & Molz, M. (2011). The rise of neo-integrative worldviews: Towards a rational spirituality for the coming planetary civilization? In M. Hartwig & J. Morgan (Eds.), *Critical realism and spirituality* (pp. 29–74). London: Routledge, Taylor & Francis Group.

Bhaskar, R., Esbjörn-Hargens, S., Hedlund, N., & Hartwig, M. (Eds.). (2015). *Metatheory for the twenty-first century: Critical realism and integral theory in dialogue*. London: Routledge.

Brown, B. C. (2012). *Conscious leadership for sustainability: How leaders with late-stage action-logics design and engage in sustainability-initiatives* (Ph.D. Dissertation, Fielding Graduate University, Santa Barbara).

Butler, C. (2002). *Postmodernism*. A very short introduction. New York: Oxford University Press.

De Witt, A. (2015). Climate change and the clash of worldviews. An exploration of how to move forward in a polarized debate. *Zygon: Journal of Religion and Science, 50*(4), 906–921.

De Witt, A., De Boer, J., Osseweijer, P., & Hedlund, N. H. (2016). A new tool to map how different worldviews in the Netherlands and USA relate to climate change. *Environmental Science and Policy*.

Devall, B., & Sessions, G. (1985). *Deep ecology: Living as if nature mattered*. Salt Lake City: Peregrine Smith Books.

Ericson, T., Kjønstad, B. G., & Barstad, A. (2014). Mindfulness and sustainability. *Ecological Economics 104*, 73–79.

Esbjörn-Hargens, S., & Wilber, K. (2006). Towards a comprehensive integration of science and religion: A post-metaphysical approach. In P. Clayton & Z. Simpson (Eds.), *The Oxford handbook of religion and science*. New York: Oxford University Press.

Esbjörn-Hargens, S., & Zimmerman, M. E. (2009). *Integral ecology: Uniting multiple perspectives on the natural world*. Boston: Integral Books.

Gidley, J. (2007). The evolution of consciousness as a planetary imperative: An integration of integral views. *Integral Review, 5*, 4–226.

Giner, S., & Tábara, D. (1999). Cosmic piety and ecological rationality. *International Sociology, 14*(1), 59–82.

Habermas, J. (1976). *Communication and the evolution of society*. Boston: Beacon Press. (Translated and with an introduction by Thomas McCarthy).

Habermas, J. (1987/2000). *The philosophical discourse of modernity: Twelve lectures* (F. Lawrence, Trans.). Cambridge, MA: MIT Press.

Hawken, P., Lovins, A., & Lovins, L. H. (1999). *Natural capitalism. Creating the next industrial revolution*. New York: Little, Brown and Company.

Hedlund-de Witt, A. (2013a). Pathways to environmental responsibility: A qualitative exploration of the spiritual dimension of nature experience. *Journal for the Study of Religion, Nature & Culture, 7*(2), 154–186.

Hedlund-de Witt, A. (2013b). Worldviews and their significance for the global sustainable development debate. *Environmental Ethics, 35*(2), 133–162.

Hedlund-de Witt, A. (2014). The integrative worldview and its potential for sustainable societies: A qualitative exploration of the views and values of environmental leaders. *Worldviews: Global Religions, Culture and Ecology, 18*, 191–229.

Hedlund-de Witt, A., De Boer, J., & Boersema, J. J. (2014). Exploring inner and outer worlds: A quantitative study of worldviews, environmental attitudes, and sustainable lifestyles. *Journal of Environmental Psychology, 37*, 40–54.

Hulme, M. (2009). *Why we disagree about climate change: Understanding controversy, inaction and opportunity*. Cambridge: Cambridge University Press.

Hurst, A. (2014). The Purpose Economy: How Your Desire for Impact, Personal Growth and Community Is Changing the World.

Inglehart, R. F., & Welzel, C. (2005). Modernization, cultural change, and democracy. The human development sequence. New York: Cambridge University Press.

Laloux, F. (2014). *Reinventing organizations. A guide to creating organizations inspired by the next stage of human consciousness*. Brussels: Nelson Parker.

Laszlo, E. (Ed.). (2006). *Science and the reenchantment of the cosmos. The rise of the integral vision of reality*. Rochester: Inner Traditions.

Lyotard, F. (1984). *The postmodern condition: A report on knowledge*. Minneapolis: University of Minnesota Press.

Mackey, J., & Sisodia, R. (2013). *Conscious capitalism. Liberating the heroic spirit of business*. Harvard: Harvard Business Review Press.

McIntosh, S. (2015). *The presence of the infinite. The spiritual experience of beauty, truth, and goodness*. Wheaton: Quest Books.

McIntosh, S., Phipss, C., Debold, E., & Zimmerman, M. E. (2013). *Campaign plan for climate change amelioration*. Boulder: The Institute for Cultural Evolution.

Naess, A. (1989). *Ecology, community and lifestyle. Outline of an ecosophy*. Cambridge: Cambridge University Press.

O' Brien, K. L. (2010). Responding to climate change: The need for an integral approach. In S. Esbjörn-Hargens (Ed.), *Integral theory in action. Applied, theoretical and constructive perspectives on the AQAL model* (pp. 65–78).

Plumwood, V. (1993). *Feminism and the mastery of nature*. London: Routledge.

Shellenberger, M., & Nordhaus, T. (2004). *The death of environmentalism. Global warming politics in a post-environmental world*. Oakland: The Breakthough Institute.

Spretnak, C. (1999). *The resurgence of the real: Body, nature, and place in a hypermodern world*. New York: Routledge.

Taylor, B. (2010). *Dark green religion. Nature spirituality and the planetary future*. Berkeley and Los Angeles: University of California Press.

Taylor, C. (1989). *Sources of the self. The making of the modern identity*. Cambridge: Harvard University Press.

Van Egmond, K., & De Vries, B. J. M. (2011). Sustainability: The search for the integral worldview. *Futures, 43*, 853–867.

Wilber, K. (1995). *Sex, ecology, spirituality: The spirit of evolution*. Boston: Shambhala.

Wilber, K. (2001). *Eye to eye. The quest for the new paradigm* (3rd ed.). Boston: Shambhala.

Zweers, W. (2000). *Participating with nature. Outline for an ecologization of our worldview*. Utrecht: International Books.

Un-fathoming the Spirit of Sustainability

Will McConnell

Abstract

Over the last twenty years, a considerable amount of thought has gone into the stubborn refusal of solutions to one of the most intractable issues of our civilization: global warming. Despite clear indications that global warming and its attendant feedback effects are likely to cause extensive damage across the globe— and may threaten the survival of human civilization itself—significant enough change in human behaviors to avoid this future has been absent in recent history. The most rigorous body of academics and professionals studying global warming and its impacts, the Intergovernmental Panel on Climate Change, has reported, with 90 % accuracy, that global warming is anthropogenic; similarly, these same scientists have articulated an array of dire consequences, within our lifetimes, if humans continue to fuel current behaviors with long-held assumptions that structure reified relations to nature and to other human beings. This essay applies recent theoretical insights from anthropology, cultural theory, and philosophy, as well as findings in marine biology and other marine sciences, scientific and social science approaches to the theories of global warming, and paleontological research to investigate and exhume the largely unexamined assumptions driving geoglobal politics of identity and the fissured, highly mobile, provisional networks of globalization itself. Cabo Pulmo, the northernmost surviving coral reef in North America, functions as an example of the "awkward engagement" characteristic of global exchange and reveals the lines of friction in global encounters. Finally, the Cabo Pulmo community offers a counterdiscourse to the failures of globalization to

Lines of friction, fissures of globalization, and the fragile recovery of North America's oldest sur-viving coral reef: Cabo Pulmo, identity, and the spiritual crisis of tourism.

W. McConnell (✉)
Woodbury University, Burbank, USA
e-mail: Will.McConnell@woodbury.edu

re-envision, reimagine, and reconstitute environmental sustainability as the community discovers alternative economic, human, and environmental identities.

Introduction

"In my generation, the change came,"[1] notes Judith Castro Lucero, President of Amigos para la Conservación de Cabo Pulmo (ACCP—Friends for the Conservation of Cabo Pulmo). It is June 18, 2013; we are speaking in front of the small office her nongovernmental organization (NGO) maintains, in the heart of the village of Cabo Pulmo, Mexico, mere steps from the sea. Cabo Pulmo's reef structures are the northern-most coral reefs in North America. Geographically, we are situated directly within the rich ecosystem her organization struggles to understand, reinterpret, and protect. ACCP literally represents the path of self-determination her community undertook beginning in the generation before hers, in a community that has spanned three generations, as the 1970s began; the forced encounter with poverty, self-understanding, and self-determination revealed severe limitations of that community's understanding of relations among the land, sea, and humans, and challenged all individuals within it to radically rethink the formative concepts through which they frame self-identity itself.

The story Judith Lucero tells is the ongoing history not only of her community but also of the land and sea surrounding and sustaining a human presence in this rich, if often challenging, land/seascape—and, as her community now understands, the uniqueness, the moment-by-moment unfolding of the indissolubility of land and sea, always already reflects, and remains, in a state of becoming *them*. In the early morning sun, her words seeming to emerge directly from the sea and sky, it becomes clear that she has a direct experience of a fragile certainty. This community and land/sea's history is not only part of a deliberately localized, contextualized past; it is also a past that refuses to remain localized and that refuses distinctions between past and present, and, even, past and future. This community has already been, as it continues to inhabit, our emerging future.

Such a paradoxical "certainty" is increasingly visible in a historical context in which the teleological, universalizing claims of orientation in identity, space, and time are subsumed by the local, the particular, and the "different."[2] If we have engaged a

---

[1]This and all subsequent quotations of Judith Castro Lucero are from interviews conducted on June 18, 19, 2013, by the author. Photo of Judith Castro Lucero by the author. *Unpublished Transcripts*.

[2]Jean Francois Lyotard, *The Differend: Phrases in Dispute* (Minnesota: U of Minnesota P., 1988). For Lyotard, the differend is language, all language, that of necessity produces inexpressible facts which harbor injustices. The differend, posing as a perfectly legitimate claim or representation, masks an injustice done to those who, due to the nature of binary relations in a discourse, are constitutionally incapable of expressing their own needs, apperceptions, situations, contextualizing life-worlds, etc. If there is a resolution of opposites within the differend, it is Lyotard's pointing to the linkages among phrases as the more significant dimension of meaning making, or producing an understanding, rather than the explicit meaning signified directly by the "meaning" of the words or phrases used to represent that meaning.

present dislocated from a Hegelian past, we have not emerged into a horizon of the future which grounds us in a grand theory, which allows us to move from particular to universal with epistemologically grounded certainty. Nowhere does this neither/and, attendant fractured subject, and anxiety of the object express itself more clearly than in the irruptions of meaning and spatiotemporal volubility characteristic of sustainability discourse. Within this emerging discourse, science and aesthetics, politics and psychology, and culture and economics graft and distance themselves without seeming to encounter any representational frictions. "Sustainability" and "environmental sustainability" are often understood and thus enacted socially, politically, culturally, economically, and environmentally, as interchangeable, such that "sustainability" has come to signify a temperamental, makeshift a priori: "environmentally based, rationally directed decision-making." Similarly, sustainability discourse tends to collapse "sustainability" and "spirituality" into singular speech/acts, such that purported social acts of "sustainability" are always already spiritual expressions of a "deeper" relation to "the environment."

Divested Sustainabilities and the Overdetermined Spiritual

In the meaning valence of "sustainability" discourse, "consciously" purchasing a Prius and "intentionally" consuming a brand of packaged water whose manufacturer reduces plastic content in each single use, plastic bottle is at once "sustainable" and environmentally destructive. What is achieved in this "conscious," "intentional" behavior is often no more than a dislocation, a delocalizing of environmental and social degradation and a paradoxical relocalizing of destruction. The interpellated circuits of economic production/consumption and linguistic, cultural appropriations of meaning and language eventuate in an underdetermined globalization of waste; "surplus value," produced by the excess of value in the transformation of the environment from its natural state to a discontinuous if unified series of consumer objects, ensures a double erasure of the environment. Both on the producing end and at the receiving end, the environment absorbs and renders invisible the activity behind the production of "surplus value," in the conversion of all animate beings and inanimate objects categorized as "nature" into raw materials and raw materials into consumerist networks of exchange value. This interpellation,[3] an interpretation of wasteful practices reified into acceptability through the metaphor of consumption, fixes the production/waste cycle as not only desirable but also *indispensable*, necessary, precisely in its creation of economic and ecological garbage.

---

[3]I am thinking of Louis Althusser's "Ideology and Ideological State Apparatuses (Notes Toward an Investigation)" in *Lenin and Philosophy and Other Essays* (Verso: 1970): An individual is always first a "social subject"; it is a misrecognition to think that the individual is not always first a form, a pattern of responses conditioned in and by social discursive forces, before he/she is recognizable as an individual. Thus, we cannot recognize ourselves outside of the social forms that at once figure and disfigure us.

In its acceleration and depersonalization of environmental and social degradation, this reification thereby inscribes, in human culture, economics, and political activity, as in the landscape, a re-invisibilizing of environmental damage, conceptually, linguistically, and functionally, in communities across the globe. This tensile circuit of meaning, the dirty secret of postmodern exercises of "spirituality," produces not an eradication of these environmental and social justice issues but a politically and socially sanctioned form of understanding that ensures the reproduction of these inequities. Thus, along with "the Prius," we are sold "clean coal" technologies—a language that belies the globally inflected complexities in the continued, consumer-based production of ecological damage. In 2014, for example, the USA generated 4093 billion kilowatt hours of electricity—roughly consistent with patterns of per capita energy consumption in the USA since the 1970s. Not included in this trend analysis, however, is the significant amount of overseas energy necessary for the production of retail and industrial goods ultimately destined for, and consumed in, the USA. Structures in the linguistic, discursive fields of nationality; discourses of technology, engineering, and the sociopolitical language of energy production; and meaning production in environmental sustainability and accountability discourse collude to obscure the globally inflected complexities of (un- or ill-perceived) environmentally damaging sources of energy production and patterns of consumption.

Such are the patterns of interpretation attendant in "best practices" approaches; such is the situation of global entanglements and local practices now facing first-world consumers who attempt to remain within the current paradigms of consumption at the same time that they adopt a more intentional approach to the spiritual economies of environmental sustainability. Further complicating the technological progress and spiritual-sustainability signified by "the Prius" and strategies in the reduction of plastic per bottled water container: within the country, according to the U.S. Energy Information Association (EIA), "about 67 % of the electricity generated was from fossil fuels (coal, natural gas, petroleum)."[4] Such strategies appear less a reduction of damage than a dislocation and obfuscation of point-of-source pollution. Collapsing "sustainability" and "environmental sustainability" produces a perfectly acceptable conceptual interchangeability of the two in the marketplace of "environmental" decision-making; the functioning of "the economy" in a myriad of consumption decisions and practices across the discourse of "sustainability" no longer seems coincident with the production of historically conditioned forms of waste and socio-environmental forms of damage.

Plastic Waves and Extinction Climates

Nowhere are the limitations of such strategies for understanding "sustainability" more apparent than in the rising visibility of environmental damage due to plastics in the ocean, and in the scientific findings of CO_2 absorption rates in, and

---

[4]Retrieved January 12, 2016: https://www.eia.gov/tools/faqs/faq.cfm?id=427&t=3.

consequences of atmospheric CO_2 for, ocean environments. On November 12, 2015, the Muana Loa Observatory in Hawaii recorded what *The Atlantic* has called an "epochal threshold"[5]: for the first time in recorded history, the atmosphere measured 401.64 parts per million of carbon dioxide. Scientists estimate that, based on records beginning in 1958, atmospheric CO_2 has now increased by 24 % in the 58 years since measurement began. More troubling, NASA scientists report, "atmospheric carbon in our era is now higher than it's been in at least one million years—and perhaps in 25 million years."[6] The deeper implications of this finding can be found in the debates surrounding paleontological research into geological records; these scientists are in agreement that five mass extinction events have occurred throughout earth's history: the end of the Ordovician period [440 million years ago (MYA)]; in the late Devonian period (370 MYA); the end of the Permian period (245 MYA), when 80–95 % of all marine species went extinct; the end of the Triassic period (210 MYA), which resulted in a 50 % reduction in all marine invertebrates; and the end of the Cretaceous period (100 MYA), in which the dinosaurs went extinct and oceans flooded up to 40 % of the continents.[7] In all cases of earth's major extinction events, the scientific community is in agreement that the "slow violence" of rising atmospheric carbon dioxide levels appears to be present. Further, at least four of these extinction events in history occurred over tens of thousands of years—not due to the current anthropogenic driver of global warming phenomena, which has already recorded, and continues to project, a historically unprecedented rise in CO_2 levels within the 100 years of this century.[8]

The body of studies on plastic production is strong; plastic's resilient interactivity with marine organisms and in marine ecosystems, as well as the universality of plastics' consumption—inescapably and unwittingly consumed by virtually all organisms on earth—is well documented; plastic moves, in increasingly smaller increments, both through and into bodies, coursing like the waves of a delegitimized, obfuscated culture. However, plastic's unacknowledged and dangerous ubiquity, its inexorable movement toward a grandiose hypoxia, will not belie future generations forced to live through its unrelenting uniformities. For those

---

[5]Robinson Meyer, "Earth's Atmosphere Just Crossed an Epochal Threshold," *The Atlantic*, November 24, 2015. Retrieved November 24, 2015: http://www.theatlantic.com/science/archive/2015/11/november-11-2015-the-last-day-of/417378/.

[6]"NASA scientists react to 400 ppm carbon milestone," http://climate.nasa.gov/400ppmquotes/. Retrieved: December 27, 2015.

[7]J.E. Vernon, "mass extinctions and ocean acidification: biological constraints on geological dilemmas," *Coral Reefs* (27: 3), 2008. Retrieved December 10, 2008: http://seserver.ethz.ch/staff/af/fi159/V/Ve053.pdf.

[8]From "Concluding Installment of the Fifth Assessment Report: Climate change threatens irreversible and dangerous impacts, but options exist to limit its effects": "Since the 1950s, many of the observed changes are unprecedented over decades to millennia." Intergovernmental Panel on Climate Change (IPCC), November 2, 2014. Retrieved February 12, 2015: https://www.ipcc.ch/pdf/ar5/prpc_syr/11022014_syr_copenhagen.pdf.

generations, its singular ability to remain in recession, like Zeno's paradox of dichotomy,[9] is likely to produce successive historical accretions of slow violence. In its torturous purity, for successive future generations, it may come to signify the culture of an insistence present, always and everywhere on its way to occupying both past and future.

There is already, now, no escaping this toxified geography of bodies and oceans of plastic we have crafted out of a forgotten, ill-designed, and ill-considered convenience. Arguably, a plastic ocean is more dangerous than a plasticized land: the ocean, literally, produces every other breath we consume. Similarly, the ocean occupies 78 % of the earth's surface. In the hyperproduction and attenuated post-consumption of plastics, the ocean can do little but perform the differend of a truce: at once receive and refuse absorption. Oceans regulate climate patterns, currently absorbing upward of 30 % of atmospheric carbon dioxide, and as a result, marine organisms—coral reefs in particular—already are entering distinct patterns of extinction in the combined effects of CO_2 (over)loading, now discovered to be warming from the depths as well as the surface of the ocean,[10] and rising sea levels with CO_2 as a forcing agent.[11] Incredibly, but not surprisingly, there are significant gaps in policy-based research on plastics.

However, all fields of research on plastics point readers to similar conclusions: Plastics are creating multiple, highly dangerous forms of damage in marine ecosystems and that damage is occurring across all tropic levels of marine life. Less well known is the actual measurement of plastics being produced globally. In the

---

[9]Plastic cannot arrive at a fixed destination; once underway, it enters the economy of a continual approach.

[10]See, for example, Peter J. Gleckler, Paul J. Durack, et al. "Industrial-era global ocean heat uptake doubles in recent decades," *Nature Climate Change,* January 18, 2016. Retrieved January 22, 2016 from http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate2915.html#access. Using varied source data, but relying on a network of 3200 robotic floats (called ARGO), Gleckler and his colleagues were able, for the first time, to measure salinity and temperature data from ocean depths up to 6500 ft, from across the globe. Their findings: half the global ocean heat content since 1865 has come from the last two decades; up to 35 % of that heat was absorbed below 2300 ft. As Glecker noted elsewhere, "[t]he takeaway is that the rate at which the global ocean is absorbing excess heat, has rapidly increased—so that in more recent times since 1997, it has absorbed as much heat as it took 100 years to absorb. That is alarming." Michael Casey, "Here's the Most Detailed Picture Yet of How Much the World's Oceans are Warming," *Vice News*, January 18, 2016. Retrieved January 29, 2016: https://news.vice.com/article/heres-the-most-detailed-picture-yet-of-how-much-the-worlds-oceans-are-warming.

[11]There are other stressors impacting marine populations. For the scope of damage, see the World Wildlife Fund's living planet index (LPI), a meticulously researched set of measures: "LPI for marine populations, compiled for this report, shows a decline of 49 % between 1970 and 2012. This is based on trends in 5829 populations of 1234 mammal, bird, reptile and fish species. With many more species and locations included, the marine LPI in this report is almost twice as large as it was in the Living Planet Report 2014, giving an even clearer picture of ocean health—and the decline is even greater than previously described" (6). *Living Blue Planet Report: Species, habitats and human well-being* (2015). Retrieved May 22, 2015 from http://assets.worldwildlife.org/publications/817/files/original/Living_Blue_Planet_Report_2015_Final_LR.pdf?1442242821&_ga=1.247429956.1974159267.1454290590.

most recent and most rigorous research released to date,[12] the Ellen McArthur Foundation reports that, "[a]fter a short first-use cycle, 95 % of plastic packaging material, or USD 80–120 billion annually, is lost to the economy. A staggering 32 % of plastic packaging escapes collection systems." If the current growth of plastics usage continues as projected, "the plastics sector will account for 20 % of total oil consumption and 15 % of the global annual carbon budget by 2050."[13] "More than 8 million tons of plastics" enter ocean systems yearly; scientists estimate that 165 million tons of plastic are circulating through the five gyres that together comprise the current circulation patterns of the global oceans. These rates are expected to double by 2030; if current trends continue, more plastic than fish will inhabit the oceans by 2050.[14] Perhaps most significantly, the authors of *New Plastics Economy* report that "[t]oday's plastics economy is highly fragmented. The lack of standards and coordination across the value chain has allowed a proliferation of materials, formats, labeling, collection schemes, and sorting and reprocessing systems, which collectively hamper the development of effective markets. Innovation is also fragmented."[15]

   As the above findings suggest, potent conceptual distinctions that could be readily available as mobile strategies for "best practices" in decision-making are thereby enervated in a discourse impossibly imbricated in historical accretions of language and misrecognitions of subject–object relations. To collapse tensions in meaning between "sustainability" and "environment," and further "spirituality" and "sustainability" is to invite a seemingly infinite number of misapperceptions about the full horizon of intelligibility possible if we were to develop conceptual tools that foreground, for example, tensions between "economic" and "environmental" forms of sustainability. Similarly, continued prevarication of, and elision in activating existing conceptual reworkings of long established tools for understanding the destruction well underway, in the name of economic production and practices of "convenience," will continue to contribute to the exponential damage identified above by coalition-led groups such as the Ellen McArthur Foundation & McKinsey & Company. To foreground this misapperception so prevalent in current thought and representation, some environmentalists will proclaim that without the environment, there is no economy. Yet the truth of this deinterpellation of "environment" and "economy" is that, without the current concept and practice of the "economy," there is no horizon of intelligibility that has gained purchase in the global linguistic economy for interpreting "environment." As the anthropologist Anna Tsing suggests, our first task for moving toward a more environmentally sustainable relation with both other human and non-human inhabitants of the earth

---

[12]*The New Plastics Economy—Rethinking the future of plastics,* World Economic Forum, Ellen MacArthur Foundation and McKinsey & Company (2016). Retrieved January 27, 2016: (http://www.ellenmacarthurfoundation.org/publications). "This report bases its findings on interviews with over 180 experts and on analysis of over 200 reports" (16).

[13]*New Plastics Economy,* 17.

[14]*New Plastics Economy,* 17.

[15]*New Plastics Economy*, 17.

is to seek "a whole spectrum of not-yet-fully described interactions between humans and non-humans."[16]

Where does this complex of language, forgetting, and reified economies of performing consumption leave us? In every word and gesture, we seem to celebrate and mourn in the same apprehension of ourselves; that is, at the same time that we celebrate the illusion of freedom from absolutes, we long for that experience of certainty in which all forms of experience, of struggle, and of irreducibility are subsumed in a progression toward an inevitable "oneness," "wholeness," and res-olution of opposites—the grand theory of history underpinning Western concepts of technology, progress, leisure, resources, identity, work, geographically inscribed identities, and practices of nationhood. The earth remains projected, too, into this shading of "unlimited" capacities for production and limited resources, local environments damaged by globalized chains of production and the "infinite" marketplace in which the earth becomes an extra-temporalized absence.[17]

The Differend, Slow Violence, and Alternate Histories

Judith Lucero and Cabo Pulmo's history is eerily prescient, a harbinger that appears like a postmodernized species of prophecy, mobilizing a rapidly spreading real-ization of impending and massive, conceptual, and social impact. The differend takes all participants who enter its space/time into the lacunae between "solution" and "failure," "adjudication" and "capitulation," and "identity" and "dispersal." For Lyotard, the differend is represented as a dispute between two, or among more than two, parties, whose language games—forms of expression and understanding—are so different from one another that no consensus on a solution can be reached. For Michel Foucault, such tensions often are politico-cultural and aesthetic expressions of power, domination, suppression, occlusion, and/or violence. In *An Ethnology of Global Connection*, anthropologist Anna Tsing applies the scaffolding of Lyotard's concept "differend" to read the recent history of the Indonesian rain forest. Tsing attempts to circumvent simplistic readings of the varied phenomena of globaliza-tion, itself a phenomena that is often misread as an inexorable, ahistoricized movement toward democracy, equality, and the enervation of cultural and political difference. Framing the Indonesian rain forest as a space of "awkward engage-ment," (xi) Tsing finds a charged space of interactivity in which the mingling of "hope and despair" reformulates "global capital, remaking the culture and politics of globalization" (270). Tsing constructs the concept "friction" as a tool to approach the complexities of globalization without falling into the trap of either wholly

---

[16]*Friction*, 23.

[17]As Lyotard characterizes our current frameworks of understanding, in the typically fragmented style of the text: "[t]he 'linguistic turn' of Western philosophy (Heidegger's later works, the penetration of Anglo-American philosophies into European thought, the development of language technologies); and correlatively, the decline of universalist discourses (metaphysical doctrines of modern times: narratives of progress, of socialism, of abundance, of knowledge) (xiii). We are left with the differend as our means of understanding language and history. *The Differend.*

embracing the particular and local or rejecting outright the power of the univer-salizing (unifying) gesture in interpretations of globalization. "Roads are a good image for conceptualizing how friction works: roads are pathways that make motion easier and more efficient, but in doing so they limit where we go."[18]

An enabling and a limitation, "friction" occupies the space between secure identities: dependent upon individuated identity, but producing insight in the inse-cure energy of non-absorption in and by a too secure adoption of, and absorption in, the concept and practice of identity. As Tsing articulates, "[a] study of global con-nections shows the grip of encounter: friction. A wheel turns because of its encounter with the surface of the road; spinning in the air it goes nowhere. Rubbing two sticks together produces heat and light; one stick alone is just a stick. As a metaphorical image, friction reminds us that heterogeneous and unequal encounters can lead to new arrangements of culture and power"[19] Tsing's "friction," like Lyotard's "dif-ferend," attempts to elide more common perceptions and knowledge production dependent upon identity politics and instead generates a localist/universalistic ethics across the now globally recognized need to re-examine how concepts of identity shape, reshape, and mis-shape race, class, gender, and nationality. This movement is simultaneously a distending and reservation of identity such that it can provide a more complex socioeconomic set of tools to understand our participation in syn-chronous processes of local and global exchange—that is, help us see the interactive geography, the exchange topographies, in which we live. Disparate local acts of consumption enjoin with global impacts of transfer and accretion, such that geo-graphically disbursed environmental processes may produce what Rob Nixon calls "slow violence." For Nixon, slow violence "occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all."[20] But how does this struggle to see the complexities of a globalized economy of exchange form "the ocean?"

The Gulf of California/Sea of Cortez

What is now Cabo Pulmo National Park (CPNP) is situated on the southeastern end of the Baja Peninsula, Mexico, in the cape region; significantly, it is located just sixty miles northeast of the resort developments of Cabo San Lucas. Far smaller, and far less densely populated than Cabo San Lucas, Cabo Pulmo's total area is 7111 hectares (17,571.66 acres or 71 km^2).[21] It was designated a marine protected area (MPA) by the federal government of Mexico on June 6, 1995. By 2005, due in large part to the

---

[18]*Friction*, 6.

[19]*Friction*, 5.

[20]Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, Massachusetts: Harvard U.P., 2011), 2.

[21]The geographic coordinates are defined as follows: 23° 30′ 00″–23° 22′ 30″N; 109° 22′ 59″–109° 27′ 58″W (*Decreto por el que se declara área natural protegida con el carácter de Parque Marino Nacional, la zona conocida como Cabo Pulmo*). Retrieved March 12, 2013: www.cabopulmovivo.org/portal/documents/1._decreto_cabo_pulmo.pdf.

community's dedication, the park received further recognition by the United Nations Environment Program as a World Heritage Site; similarly, the RAMSAR convention of 2008 added Cabo Pulmo to its "Wetland of International Importance" list. Due to its status as one of the most biologically diverse marine environments in the world, UNESCO declared the Sea of Cortez not only a World Heritage Site, but also a Biosphere Reserve; more recently, it has been recognized as a natural laboratory for the investigation of speciation. As UNESCO notes, "almost all major oceanographic processes occurring in the planet's oceans are present in [the Sea of Cortez], giving it extraordinary importance for the study of marine and coastal processes."[22] The sea has over 300 estuaries and wetlands, which generate large amounts of nutrients as well as provide breeding and growth space for innumerable living organisms.

Despite its close proximity to the developed site that is now Cabo San Lucas, the contrast between these two approaches to tourism could not be more stark; compared to those of Cabo Pulmo, the environmental resource implications for economic development projects like Cabo San Lucas seem to come from another era, another reality, than the ongoing, ecologically-oriented future planning that Cabo Pulmo represents. The contrast between the two sites represents the two poles across which Mexico (and many other nations) is now discovering its own fissure lines of global articulation.

But, how did this community recognize what has taken the remainder of the world another twenty-five years to discover? Judith Lucero's story presages the journey the remainder of the globe is now beginning to embark upon. Her story is actually a story of Tsing's "friction": the discovery of self and community as a relation itself, a form of shared, difficult, hard-won experience, expressing the reorientation of one small community (180 people)[23] toward a form of self-determination. This identity includes equal consideration of the future of a community and the ecological systems surrounding and sustaining it. This is a shared commitment *as* an ongoing, future-oriented mediation between economic and environmental sustainability. As Judith Lucero tells her own story, she bears witness to her community's attempts to reinterpret its own spirit and history. In the process, the community continues to re-envision a more economically and environmentally sustainable[24] identity in the emerging context of wider, global, social, economic, political, and cultural change.

---

[22]Retrieved April 24, 2013: http://whc.unesco.org/en/list/1182.

[23]*Plan Estratégico*, 4 (May 2012). Print. Provided to the author by Judith Castro Lucero.

[24]Here, I depend on the definition of "sustainability" advanced by the 1987 Brundtland Commission: Sustainable development "meets the needs of the present without compromising the ability of future generations to meet their own needs." *Our Common Future*, http://www.un-documents.net/our-common-future.pdf. This definition, as instrumental as it has been in provoking global discussion, reorienting international and underwriting multiple nations' policy changes over the last twenty-five years, continues to reveal its limitations—foremost among which have been its embeddedness in the very historicized perspective and language that privileges, as it universalizes, an anthropocentric subject/object relation, thereby reifying a human/nature dichotomy that the hard-won perspective attempts to subvert. The history of what this definition has produced in the sustainability discourse that emerged since its publication, across the chains of signification that construct our understanding of "sustainability and sustainable behavior, has forced the occlusion of significant paths forward for avoiding catastrophic consequences worldwide.

Cabo Pulmo: The Northernmost Surviving Coral Reef that Almost Wasn't

The deeper story of this community's struggle to transform itself begins decades before such national and international recognition enumerated above came; in fact, it seems unlikely that these accolades, this worldwide recognition, would ever have come if not for Cabo Pulmo's repeated attempts to define itself as an openness toward redefinition. Judith and her extended family come from a three-generations-long relation to the ecosystem of Cabo Pulmo. Her grandfathers, uncles, and cousins were all fishermen based in Cabo Pulmo, with what she and her community now regards as a limited understanding of, and a markedly unhealthy relation to, their surroundings. "We saw the reef as our garden," she says. Subtly, she points out the limitation of the garden metaphor for understanding humans' relation to the forms of life—many of them endemic species—struggling to survive beneath the surface of both the waters and against the village inhabitants' understanding of the needs below the Sea of Cortez. A garden grows when humans, by establishing a relation with it, thereby actively provide for it. "But we didn't care for it, because we didn't know how to."

By the early 1970s, her family began to notice the changes they, themselves, had participated in producing. "They noticed, every day, less and less fish. They had to go farther to get the fish…buy gas, ice…maintain equipment…" Across the 1970s into the early 1980s, they would see increasingly diminishing returns on their time and investments. The situation put not only their livelihoods, but also the survival of their community in peril.

In reality, her grandfathers, uncles, cousins, and brothers were merely among the first around the globe forced to understand, by direct experience, emerging, widespread patterns in marine food chain enervation, species' collapse and ecosystem exhaustion due to overfishing, and the visible effects of land-based pollution, nutrient loading/overloading, and habitat fragmentation—all driven by the anthropogenic results[25] of a particular, stubborn form of dissociation with our environments that many of us are only beginning to understand. This community, however, began to recognize, by 1973, that their current understanding was, in its effects, a reified relation to the sea but that had, paradoxically, also sustained them

---

[25]See, for example, the Intergovernmental Panel on Climate Change (IPCC) latest (fifth) report, *Summary for Policy Makers,* on causes and impacts of global climate change, September 27, 2013: "It is *extremely likely* that human influence has been the dominant cause of the observed [global] warming since the mid-20th century…[t]he observed warming since 1951 can be attributed to the different natural and anthropogenic drivers and their contributions can now be quantified. Greenhouse gases contributed a global mean surface warming *likely* to be in the range of 0.5 °C to 1.3 °C over the period 1951–2010, with the contributions from other anthropogenic forcings, including the cooling effect of aerosols, *likely* to be in the range of −0.6 °C to 0.1 °C" (*SPM* 12; italics in original). In contrast, "[t]he contribution from natural forcings is *likely* to be in the range of −0.1 °C to 0.1 °C, and from internal variability is *likely* to be in the range of −0.1 °C to 0.1 °C. Together these assessed contributions are consistent with the observed warming of approximately 0.6 °C to 0.7 °C over this period" (*SPM* 12-13; italics in original). Retrieved September 27, 2013: http://www.climatechange2013.org/images/uploads/WGIAR5-SPM_Approved27Sep2013.pdf.

for generations.[26] Although they had not studied marine biology and knew little of the scientific methods of observation and analysis constitutive of oceanography, as fishermen, they had built considerable, indigenous forms of knowledge. They knew the signs of the sea intimately. "They could say when it was going to rain, when the tides will change," Lucero notes. But their knowledge came primarily from the decks of their boats; they did not often venture beneath the surface of the ocean. At once a symbol of the deep respect for the power of the ocean, it also became a debilitating form of interaction with the sea—a lived relation that undermined their ability to understand other horizons of knowledge, other possibilities, and, perhaps most significantly, other forms of human–ecosystem relations.

The struggle for a new self-definition also emerged as a lived relation, a shared confusion made visible in sheaths of frustration, shock, and fear, and an uneasy discordance between what they had always known and their own shifting observations, day after day forced upon them from the depths of the sea as they returned to shore with nearly empty holds and diminishing economic stability on land. Initially, economic instability among the community forced Judith and her community to become early adopters of a new, sometimes difficult, often confusing relation to their environment. In the beginning stages of this struggle, they were isolated in their own practices of misunderstanding.

The catalyst for the changes they have made in themselves and their environment was the gap between existing relations to the environment and expectations of long-term sustenance, gaps produced by a discrete number of simple, often unstated assumptions we are now facing globally, but whose implications we are only beginning to understand globally. In part, this lacunae in conceptualizing our relation to the environment is a remnant of Hegelian teleological, universalist thinking about the ocean, which increasingly now appears at odds with scientific, observation-based, globally substantiated research. Long after evidence began to suggest otherwise, we have held to the certainty that the sea would always provide as it had; that processes outside of individual and collective control would continue to assure patterns of "increasing yields"; that ongoing improvements in technology would engender and support natural processes for ensuring biodiversity via improved techniques for creating and maintaining benchmarks in fishing levels across trophic levels; that improving technologies of species farming/harvesting and propagation would relieve pressures on ocean resources; and that "enlightened self-interest" would suffice to regulate economic security and development in

---

[26]See Boris Worm et al. "Impacts of Biodiversity Loss on Ocean Ecosystem Services." *Science* (3: 314), November 2006: 787–790. Worm et al. published ground-breaking (and hotly debated) studies on patterns in marine species collapse. As the authors note, "…regional biodiversity losses impaired at least three critical ecosystem services…: number of viable (noncollapsed) fisheries (– 33 %); provision of nursery habitats such as oyster reefs, seagrass beds, and wetlands (–69 %); and filtering and detoxification services provided by suspension feeders, submerged vegetation, and wetlands (–63 %)…these data suggest that substantial loss of biodiversity…is closely associated with regional loss of ecosystem services…and increasing risks for coastal inhabitants …" (788–789). See also Myers & Worm, "Rapid Worldwide Depletion of Predatory Fish Communities." *Nature* Vol. 423 May 2003: 280–283.

patterns of human interaction with, and species extraction from, the ocean, etc. But the patterns of exponential growth and prudent conservation strategies, projected as support for these assumptions, decades ago ceased to materialize. The fishing community at Cabo Pulmo continued to feel the shortcoming directly, communally, as a rejection from the sea. But as the struggles across the 1970s turned into the 1980s, without abatement, the need to re-examine that relation to the ocean also became a quest for a new identity: Judith Lucero's village became a cultural and economic outlier of necessity.

In the early 1980s, as Cabo Pulmo struggled with its history, scientists from the University of La Paz, Mexico (UABCS), started to study the Cabo Pulmo reef and surrounding area. This activity, as well as interactions with the scientists themselves, helped the local people see their situation differently; but as the community rethought its relation to the reef, the ocean more generally, and the landscape surrounding their village, multiple tensions surfaced, leading to ten years of sometimes rancorous disagreements over best practices, reasoned assessments of best directions for development, to ensure their futures. Despite these internal pressures, the community began to realize that although they "had problems inside," as Judith puts it, "to fight to protect the area, we are together."

Throughout the 1980s, they were also struggling to understand the implications of their own discoveries. Lucero noted the community "took time to move from the economic base"—fishing—they had known for generations. Often, significant discoveries were made by accident: For example, a restaurant was established on a single day, in 1991, only after local residents realized they could offer food to tourists who had entered the region to view the eclipse. Similarly, fishermen who had remained on the surface of the water, but in intimate proximity to the sea for generations, now learned to scuba dive—only because one of Lucero's uncles had seen scuba divers willing to pay for the experience of diving in Cabo San Lucas. As Judith Lucero says, once they were actually submerged in the ocean, "[i]t was the first time many saw the reef; they could see the damage…we had to move from 'we take from the reef' to 'we have to protect the reef.'" Once they arrived at that fluid grounding, they had both a localized teleology that could bind them to the motility of the reef's directional plentitudes as a lived experience, while recognizing that the reef could function in both synchronous and asynchronous modes of local and global associations, exchange, and naturalized if aspirational modes of discourse. That is, they began to realize that the reef, outside of them, already had entered, and could function in, a globalized discursive field—much like humans enter the fray of globalized representation, as a community seeking a differend in order to understand the awkward encounter with unfathomed orders of identity. Thus, they asked themselves, "What is a naturally protected area?" after scientists visiting the reef informed them that an international system of recognition was possible, if they rethought their community's identity. "You need to understand the costs and benefits of becoming a protected area," adds Judith. By 1995, after ten years of painful uncertainty, they were ready to commit. They also had become more serious about protecting the reef themselves, and scientists and NGOs continued to study the reef and help advocate for the protection of the entire area.

The symbol of the community's acceptance of the area's stewardship was the formation, in 2003, of the NGO Judith now leads (ACCP). The period of development from 1995 to 2010 only increased their resolve: "It gave us more energy when we saw the change" in the reef, Judith says. That energy manifested itself most dramatically in their efforts to monitor the area themselves, as a community: As is the current practice in the design of many marine protected areas (MPAs) around the globe, Cabo Pulmo's protections began with a 35 % "no-take" zone; due to the community's organizational and policing/monitoring efforts, the MPA's no-take zone has now expanded to 100 %. And they remained open to other forms of coordination and cooperation: local businesses now provide protection services as well as transportation services, for example; other environmentally based NGOs shared resources, from helping to manage media coverage and coordinating events to workshops on how to use legal processes to represent their interests (ProEsteros). NGOs and other organizations that have cooperated with ACCP now include ProNatura, CEMDA, IEMANYA OCEANICA, DAN, ProEsteros, Nipirajá, Grupo Tortuguero de las Californias, Baja Life Foundation, Baja Sur, Baja Norte, and UC San Diego.

Clearly, their effort challenges many of the mainstays in our current oppositions for understanding humans' relation to their environments: "economic" versus "environmental" sustainability; cultural, indigenous ways of life versus modernized, mechanized, technology-driven definitions of "progress"; rural versus urban landscape development and inhabitation patterns; large-scale, top-down, economic, and regional development by international investors and tourist development conglomerates versus small-scale, deliberately localized, ground-up approaches to defining "tourism"; and regional versus national and national versus international interests.[27] As Gro Harlem Brundtland expressed in the foreword to *Our Common Future*, the challenges we all now face "cut across the divides of national sovereignty, of limited strategies for economic gain, and of separated disciplines of science,"[28]—disciplines that also now include social science and humanities-based research models as well as natural science methodologies.

Cabo Pulmo's residents understood Brundtland and his commission's message in their bones. As Brundtland was writing this report, Cabo Pulmo was already fifteen years into working through the implications of the (later) commissions' findings. Cabo Pulmo's cross-generational efforts culminated in the May 2012 publication that articulated, for the first time, the community's different relations both among themselves and within their environment: the *Strategic Plan for Tourism*

---

[27]Here, the community instantiates the insight provided in the foreword to the Brundtland report: "The environment does not exist as a sphere separate from human actions, ambitions, and needs, and attempts to defend it in isolation from human concerns have given the very word 'environment' a connotation of naivety in some political circles…. the 'environment' is where we all live; and 'development' is what we all do in attempting to improve our lot within that abode. The two are inseparable." *Our Common Future*, March 1987, Retrieved February 8, 2011: http://www.un-documents.net/our-common-future.pdf.

[28]*Our Common Future:* http://www.un-documents.net/our-common-future.pdf.

Development in Cabo Pulmo: Sanctuary of Sea, Land and People.[29] Evidence of the success of their approach is dramatic, across a number of metrics for assessing their activity: for example, their definition of "success" includes qualitative and quantitative data equally, allowing for a more inclusive, more broadly ranging yet rigorously defined set of inter- and transdisciplinary metrics and indicators. These include close tracking of the cultural and economic viability of the community itself, as well as comparative measurements of the marine organisms' biomass across ten of the years in which the Cabo Pulmo Marine Reserve's protected areas have been established.[30] Gathered by close scientific observation techniques at specific sites from 1999 to 2009,[31] biomass studies of Cabo Pulmo have been compared to biomass studies conducted in other marine protected areas—specifically, in "no-take" marine zones across the same period in the Sea of California.[32] As Aburto-Oropeza,

---

[29]Retrieved May 23, 2013: http://www.cabopulmoamigos.org/assets/plan-estrat.%c3%a9tigo-accp-2012.pdf.

[30]Studies effectively combining socioeconomic and biologic factors remain rare. See, for example, Timothy McClanahan, M.J. Marnane et al. "Comparison of Marine Protected Areas": "Few studies have objectively and simultaneously examined the types of MPAs that are most effective in conserving reef resources and the socioeconomic factors responsible for effective conservation." (1410). In *Current Biology* Vol. 16, July 25, 2006. See also Timothy R. McClanahan, "Is There a Future for Coral Reef Parks in Poor Tropical Countries?" *Coral Reefs* 18. 1999: 321–325; R.B. Pollnac, B.B. Crawford, and M.L.G. Gorospe, "Discovering Factors that Influence the Success of Community-based marine Protected Areas in the Visayas, Philippines." *Ocean Coastal Management* Vol. 44, 2001, 683–710; R.S. Pomeroy, R.B. Pollnac, B.M. Katon, and C. Predo, "Evaluating Factors Contributing to the Success of Community-based Coastal Resource Management: The Central Visayas." *Regional Project-1, Philippines: Ocean Coastal Management* 36, 1997, 97–120; and J. Cinner, "Socioeconomic Factors Influencing Customary Marine Tenure in the Indo-Pacific." *Ecology and Society*, Vol. 10, 2005, 36.

[31]The effectiveness in management of conserving reef resources was examined with underwater visual consensus of key resources and ecological parameters at replicate study sites located both inside and outside managed areas. In effect, teams of scuba divers return to specific sites over a ten-year period and count the number of fish with close observation techniques.

[32]Longitudinal studies in fish biomass measurements are all but non-existent. Two findings in comparative, independent studies of marine protected areas, which include Cabo Pulmo, point to the success of Cabo Pulmo across key indicators of the area's living systems. See, for example, O. Aburto-Oropeza, B. Erisman, et al., "Large Recovery of Fish Biomass." *PLOSone*, 2011. Retrieved July 8, 2013: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0023601. The authors note: "In 1999, four years after the establishment of the reserve, there were no significant differences in fish biomass between CPNP (0.75 t ha^{-1} on average) and other marine protected areas or open access areas in the Gulf of California. By 2009, total fish biomass at CPNP had increased to 4.24 t ha^{-1} (absolute biomass increase of 3.49 t ha^{-1}, or 463 %), and the biomass of top predators and carnivores increased by 11 and 4 times, respectively. However, fish biomass did not change significantly in other marine protected areas or open access areas over the same time period." See also O. Velasco, et al. "Monitoreo Comunitario en Areas Naturales Protegidas," 2009. Retrieved April 12, 2013: https://www.google.com/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=O.+Velasco%2C+et+al.+%E2%80%9CMonitoreo+Comunitario+en+Areas+Naturales+Protegidas.%E2%80%9D(2009). From the report: "El Parque Nacional Cabo Pulmo es el claro ejemplo en donde se ven los beneficios de la aplicación de reservas marinas robustas ya que al ser más grande el área de No Pesca se evidencian claramente las diferencias entre las zonas de pesca con las de no pesca y a su vez se pueden comparar con otras áreas de no pesca."

Erisman B. et al. summarize their findings, "The absolute increase in fish biomass at CPNP within a decade [at 463 %] is the largest measured in a marine reserve worldwide…"[33] Similarly, the community has re-situated its economic base to practices of sustainable tourism—they now maintain a restaurant, multiple dive shops, and offer other tourism-related activities. A recent study found that, in addition to the immeasurable value of strengthening social bonds, the economy of Cabo Pulmo is growing: by 2006, the businesses in the village generated US $538,000 per year and continue to grow. Fewer than 30 people produced that income, which averages approximately US $18,000 per capita—significantly higher than the per capita gross national income recorded for the rest of Mexico.[34]

Perhaps more significant than any of these findings are the implications for strategies that might prove effective worldwide in the struggle not merely to prevent further damage, but actually to reverse the widespread trends of species extinction and/or enervation. As Aburto-Oropeza et al. note, "The abundance of top predators and carnivores at CPNP is approaching the inverse trophic pyramid that charac-terizes reef fish assemblages that have faced little or no fishing pressure" ("Large Recovery of Fish Biomass").[35] In other words, the reef structures at Cab Pulmo now support a diverse, distinct ecosystem that is close to levels expected if no human presence had been interacting with the reef throughout human history.

Despite their successes, however, Judith Lucero and her community have learned to remain wary, to maintain a kind of vigilance over processes in the sea and on land. ACCP's most recent (and ongoing) challenge: the proposal of a 3814 ha tourist development, adjacent to CPNP, called Cabo Cortez. Dramatizing two radically diverging futures occupying the same geography, Cabo Pulmo and Cabo Cortez would be placed side by side in the landscape—they would share Cabo Pulmo's north border. However, the proposed Cabo Cortez project includes the equivalent of 30,000 rooms (in both hotels and housing developments), three golf courses, a 253 slip marina, and an airport. ACCP involved CONANP (Comisión Nacional de Áreas Naturales Protegidas), a governmental agency, to challenge SEMARNAT's[36] 2008 approval of the Cabo Cortez project (SEMAR-NAT is another governmental oversight agency, of which CONANP is a part). The ACCP and other NGOs and government organizations argued, successfully, that the Cabo Cortez development would irrevocably damage the 25,000-year-old reef and that the environmental resources of the region could not sustain the pro-posed (new) economic base for the region.

---

[33]"Large Recovery of Fish Biomass": http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0023601.

[34]See Torre de la Martínez, JA, "Desarrollo local y el estado de la economía base en Cabo Pulmo". In: Gámez AE, editor. *Turismo y sustentabilidad en Cabo Pulmo, Baja California Sur.* California, San Diego State University, Universidad Autónoma de Baja California Sur, Consejo Nacional de Ciencia y Tecnología, 2008, 133–162.

[35]See http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0023601.

[36]Secretaría de Medio Ambiente y Recursos Naturales (Ministry of Environment and Natural Resources).

In 2010, based on these and other environmental impact statements, SEMAR-NAT reversed its decision and withdrew approval for the unsustainable model of tourism proposed by Hansa Urbana Investments, representing Hansa Urbana Group in Baja California Sur (itself a subsidiary of the Spanish company Hansa Urbana). Here, too, the layering of global interest groups, interventions, proposals, and denials suggests the complexity, the dynamism, of Tsing's "frictional" interaction *as* a distinctly globalized presence. Despite this remarkable reversal, however, Hansa continues to fight the decision in court and won yet another approval in early 2015 (only to be reversed again). The land sits, awaiting a development impossible to sustain on the proposed site. The project is "stalled" or "stopped," depending upon whose perspective is acknowledged; Mexico's still-developing legal, political, and economic infrastructure of environmental protections remains inconsistently, and sometimes contradictorily, applied across multiple agencies' decisions involving MPAs.[37]

The village of Cabo Pulmo experienced these inconsistencies in governmental processes in other ways. Although Cabo Cortez was approved by SEMARNAT in 2008, "we didn't find out about it until late in 2009—from an NGO!" exclaims Judith. The incident highlights the rising tide of confusion about establishing imperatives or directions for the future: between marine protections and the current models of unsustainable tourist (and other forms) of social and economic development; over how and by whom guidelines are created for decisions identifying, measuring, and analyzing economic benefits versus social, environmental, and cultural costs of economic activity; around how to attract but also establish limits for international investment and multiple national, regional, and immediately local interests that may offer significant cash infusions in the immediate future, but that do not offer longer-term economic, environmental, or cultural sustainability in and for the regions in which they build. Reversals in decisions across these imperatives are increasingly evident both throughout Baja and globally. Disclosure, if legally mandated, is often perfunctory; transparency is often rendered opaque across competing interests and social strata; and the application of science-based, community-based decision-making processes in complex, sustainability-driven decisions is, overwhelmingly, the exception rather than the rule. But the example of Cabo Pulmo provides incontrovertible evidence that this community-driven approach is remarkably, surprisingly, successful at repositioning humans in the environment and at serving human and marine needs simultaneously. In reality, the community actually contributes to the interplay among multiple natural strata; they

---

[37]See, for example, "Groups Seek Investigation into Approval of Four 'Mega Resorts.'" April 11, 2013. Retrieved from http://earthjustice.org/news/press/2013/groups-seek-investigation-into-mexico-s-approval-of-four-mega-resorts.On April 11, 2013, a petition was submitted to the Commission for Environmental Cooperation Today (an international body established under NAFTA). Notes Sandras Moguel, of the Inter-American Association of Environmental Defense, "The Mexican authorities' approval of massive tourism projects in violation of environmental laws is unacceptable and demonstrates little regard for threatened species, the environment and local communities…[w]e urge the new Administration and Minister Guerra Abud to ensure that the approval process of development projects is transparent and not arbitrary."

participate consciously in maintaining the biodiversity of the region, in multiple strategies that now form a lived relation. They are determined to "give back," as a lived relation, to the environment.

As the example of Cabo Pulmo suggests, shifting patterns of seeing and acting, across fundamental assumptions, is not necessarily a straightforward process of insight and discovery driven by patterns of natural and social scientific data collection, observation, analysis, and new forms of inter- and transdisciplinary communication. It also involves confronting assumptions, experiencing regressions in attitudinal shifts, realigning established social relations and interpretations—and considerable struggle. As Cabo Pulmo citizens note in the executive summary of the *Strategic Plan for Tourism Development*, "…we realize the way forward will be complex."[38] But the struggle has made the community more resilient, more determined, leaving them with much stronger social bonds. And struggle fueled the drive for self-determination as a new relation to the environment.

The international community, too, struggles for accuracy, clarity, and transparency both in producing information and in its recommendations and agreements based on that information. The surging numbers of scientists studying causes and effects of global warming; the increasingly urgent tone underlying dispassionate findings of anthropogenic factors and causes; the historically unprecedented rates of destruction across ecosystems worldwide brought about by our difficulties in rethinking and restructuring relations among economic, cultural, and environmental systems of signification and interpretation; the unprecedented rates of deterioration in biodiversity across marine (and non-marine) ecosystems worldwide; the increasing evidence of the complexity of feedback effects due to global warming; and the increasingly inter- and transnational dimensions of economic and ecologically minded policy stakeholders, evident in the burgeoning multiplication and bifurcation of binding international agreements, more loosely held agreements articulated by conventions, and the (more often than not) poor alignment of regional, national, and international policies—all of these are globally inflected symptoms of hard-fought discoveries already made, across the last four decades, in the small village of Cabo Pulmo.

And these discoveries are all attempts to understand differently the history of our relations to the ecosystems that sustain life on this planet. The community that is Cabo Pulmo has struggled to produce new combinations of social justice and ecological sustainability, and better alignment in, and clearly defined, manageable and measurable goals across, a bewildering array of regional, national, and international policies, agreements, conventions, associations, organizations, and communication expectations and structures. As Judith Lucero notes of her own community's struggle, "we want to be leaders…as a community, we don't have all the information; we don't have all the tools. We have to be open." The world beyond Cabo Pulmo can benefit from both the example of their struggle and the implications of their success. They are writing into the earth a new vision of

---

[38]*Strategic Plan for Tourism Development*, English Language Executive Summary, May 2012. Print.

Brundtland's 1987 definition of "sustainability": development that meets the needs of the present while *contributing to* Earth's life-support systems, on which all present and future generations depend. The changes already faced by Cabo Pulmo mark a sea change in environmental justice: global warming is likely to be the single greatest challenge to the definition and actualization of democratic ideals in human history.[39] As such, the severity of the issues global warming will bring will also engender, of necessity, a renewed interrogation of current forms of democratic identity; new forms of environmentally based spirituality and identity will come. Globally, we have only begun to embark on this remarkable enterprise. Small, now obscure communities such as Cabo Pulmo will surface as this emerging civilization's elders.[40]

Chapter End/Study Questions

1. Do you think Cabo Pulmo is an example of Anna Tsing's "awkward engagement?" Why or why not? What features of the struggle to keep the Cabo Pulmo reef alive suggest Tsing's "friction?"
2. Do you think the key definition of "sustainability" in *Our Common Future*— the use of natural resources to meet "the needs of the present without compromising the ability of future generations to meet their own needs" is anthropocentric? Do you agree with the author that the definition needs revision to enable a more environmentally sustainable vision of the future? Explain.
3. Why do you think the ocean is often called the ultimate garbage dump of civilization? What needs to happen to change this situation? What evidence can you find that suggests the way we treat the ocean is an example of Rob Nixon's "slow violence"?

---

[39]From IPCC's "Concluding Installment of the Fifth Assessment Report": "The synthesis report makes a clear case that many risks [associated with global warming] constitute particular challenges for the least developed countries and vulnerable communities, given their limited ability to cope. People who are socially, economically, culturally, politically, institutionally, or otherwise marginalized are especially vulnerable to climate change" (1).

[40]In "Climate Change and the American People," produced by the National Climate Assessment and Development Advisory Committee, the authors concluded, "[r]esearch on ecological responses to climate change is limited, as is understanding of social responses and how ecological and social responses will react" (7). This report is the US version of the IPCC reports and follows the scientific findings of the IPCC closely, with application to specific regions in across the USA. Similarly, these same authors echoed the above findings of the IPCC: "Several populations— including children, the elderly, the sick, the poor, tribes and other indigenous people—are especially vulnerable to one or more aspects of climate change. There is mounting evidence that the costs to the nation are already high and will increase very substantially in the future, unless global emissions of heat-trapping gases are strongly reduced" (8). Supported by the National Oceanic and Atmospheric Administration (NOAA), the committee engaged more than 240 authors in the creation of the report. See "Climate Change and the American People," January 11, 2014. Retrieved January 12, 2013: www.globalchange.gov/ncadac.

4. Do you agree with the author that global warming is likely to be democracy's greatest challenge? Will changes forced upon current and future generations also force human beings to rethink their ideas of identity? Nationality? Understanding of global exchange?
5. Imagine that you are time traveling and you have landed in a human civilization 100 years from now. Describe the world you see. Explain to your friends of this future how and why you think the world became what you find 100 years from now.

Epilogue: The Ethics and Spirituality of Sustainability

15

Satinder Dhiman

Abstract

In this final chapter, we further explore the moral and spiritual basis of sustainability. What are the highest moral and spiritual principles that can raise our awareness about sustainability? Why should our actions be guided by the light of ethics and spirituality? Are there any universal values that can deepen our understanding of sustainability and awaken our responsibility toward the environment? Is human life more precious than other forms of life—the trees, birds, fish, and other animals? What is the metaphysical truth underlying the notion that all existence is One and that all life is a single unitary movement? What can we all do to maintain the cosmic order of the universe? How moral vision and practical spirituality can save our planet? To find answers to some of these abiding questions is to understand the ethics and spirituality of sustainability. One of the key topics of this chapter is the ethics of eating, presented in the form of transitioning to a plant-based diet, as the single most important change we can all make to safeguard the sanctity of our planet.

Wholesome Thinking and Wholesome Conduct: *Dharma* and *Karma* Are Closely Aligned

> *If you want to know your past, look at your present.*
>
> *If you want to know your future, look at your present.*
> *We get what we give.*

S. Dhiman (✉)
Woodbury University, Burbank, USA
e-mail: satinder.dhiman@woodbury.edu

> *Every thought we think is creating our future.*
> *This is the alpha and omega of practical morality, spirituality and sustainability.*

In Indian philosophy, *dharma* (moral order, law, harmony) and *karma* (moral causation) are closely interlinked: that is, our actions (*karma*) have to be guided by the light of ethics. *Dharma* is not an intellectual creed; it is a way of being. Hence, the refrain: *satyaṁ vada, dharmaṁ cara*: *Speak* the truth, *follow* the path of *dharma*. The great Indian epic Mahābhārata shows how *dharma* and *karma* govern our lives. *Dharma* is what is the right thing to do at a given time or in a given situation. It is based on wisdom, insight, and human values. It is well said that "*dharmo rakshita rak-shata*"[1]—*dharma* protects the one who protects (follows) *dharma*. However, if one does not follow *dharma*, one has to reap the results of one's actions as a natural consequence. That is *karma*—we reap what we sow, *sooner or later*.

Every action has two types of results—visible and invisible. Visible effects are mostly experienced directly in terms of immediate results, such as good or bad feelings, depending upon the *moral quality* of our actions. The invisible "effects" of our actions depend solely on the *moral intention* behind performing them. When we act with pure motivation—with the intention of helping others—the invisible merit of such actions accrues and shows up later in the form of what we normally call "good luck." The converse is equally true. In this regard, the Bhagavad Gītā seeks to awaken the innate sense of *dharma* within us and exhorts us to act righteously. When one follows the path of *dharma* steadfastly, one's mind becomes pure and a fit instrument to understand the subtle teachings of self-knowledge that lead to everlasting happiness and freedom (*mokṣa*), the summum bonum of life. This is the final purport of the central teachings of the Mahābhārata, and the text embedded in it, the Bhagavad Gītā, a compendium of ethics and spirituality.

One has to look within oneself, grasp the true intent and spirit of *dharma*, and act in the best interests of the self and one's fellow beings. The highest goodness is non-violence (अहिंसा परमो धर्मः अहिंसा परमा गतिः)—non-violence is the absolute form of religious austerity and love toward all human beings. *Non-injury is therefore the first and last universal value that serves as a guide to our conduct.* This is also the first step on the spiritual ladder—making sure that our actions (mental, verbal, and physical) do not cause any harm to any being in any shape or form. This principle of non-harming extends to all forms of life—animate and inanimate. In the next section, we briefly consider the moral and spiritual basis of sustainability.

Moral and Spiritual Basis of Sustainability: *Help Ever, Hurt Never*

What is the moral and spiritual basis of sustainability? For a most profound answer, let us again turn to the great Indian epic, Mahābhārata, which contains 100,000 verses and is considered to be the world's longest epic poem (it is more than seven times the

---

[1]*Manu Smriti* 8.15.

combined size of Homer's *Iliad* and *Odyssey*).[2] Its claim to greatness, however, does not rest on its length but in the breadth of its message. It has been rightly said about the Mahābhārata, "Whatever is here, on Law, on Profit, on Pleasure, and on Salvation, is found elsewhere. But what is not here is nowhere else."[3]

A.R. Orage, the British philosopher whom George Bernard Shaw once called the "the most brilliant English editor and critic of last 100 years,"[4] who studied Mahābhārata concertedly for 15 years, remarked that it contained absolute truths and universal values. Orage extolls its glory as follows:

> The Mahabharata is the greatest single effort of literary creation of any culture in human history. The *Iliad* and the *Odyssey* are episodes in it; and the celebrated Bhagavad Gita is simply the record of a single conversation on the eve of one of its many battles….(It is) the most colossal work of literary art ever created. It contains every literary form and device known to all the literary schools, every story ever enacted or narrated, every human type and circumstance ever created or encountered.
>
>   Unlike the reading of derivative works of art, the reading of the Mahabharata is a first-hand experience. One ends it differently, just as one emerges differently from everything real. The Mahabharata towers over all subsequent literature as the pyramids look over the Memphian sands….More real Mysticism can be gathered from the Mahabharata than from the whole of modern mystical writings.[5]

The legendary author of this epic, Veda Vyāsa, when asked about the most important single verse that represented the essence of the entire work, replied:

> श्लोकार्धेन प्रवक्ष्यामि यदुक्तं ग्रन्थकोटिभिः ।
> परोपकारः पुण्याय, पापाय परपीडनम् ॥
> *ślokārdhena pravakṣyāmi yaduktaṁ granthakoṭibhiḥ |*
> *paropakāraḥ puṇyāya, pāpāya parapīḍanam ॥*
>
> I will present the gist of a million treatises in half a verse:
> The greatest virtuous act is doing good to others; and
> the greatest evil is causing pain to others.

It is important to reflect on this verse singled out by the learned author of this great work. In order to understand the spiritual depth of this observation that "hurting others is the greatest evil," we have to dig further into the truth of our existence. Let us consider the following illustration: At its most basic level, all existence—from a piece of rock to the most developed specimen of living beings—is composed of five

---

[2]See: Krishna Maheshwari, Mahabharata, *Hindupedia*, retrieved January 22, 2016, http://www.hindupedia.com/en/Mahabharata#cite_note-0.

[3]J.A.B. van Buitenen, trans., *The Mahabharata, Volume 1: Book 1: The Book of the Beginning* (Chicago, IL.: University Of Chicago Press, 1980), 130.

[4]Philip Mairet, *A.R Orage: A Memoir* (New Hyde Park, NY: University Books, 1966), 121. Also see: Wallace Martin, *The New Age under Orage: Chapters in English Cultural History* (New York, Manchester University Press, 1967).

[5]See Avin Deen's response: Mahabharata (Hindu epic): Why do some Indians think Mahabharata is superior to all other epics ever written? Retrieved January 28, 2016: https://www.quora.com/Mahabharata-Hindu-epic/Why-do-some-Indians-think-Mahabharat-is-superior-to-all-other-epics-ever-written.

fundamental elements: earth, water, fire, air, and space. Each of these elements within our body, for example, exists with reference to the totality of its corresponding element outside our body. Take, for example, the element of air. The air that we breathe in exists by virtue of its relationship and interaction with the totality of air that exists outside in the environment. Likewise, the water that exists in our body in the form of various liquids cannot exist without the totality of water that exists outside. The same is true of the remaining elements: They exist in the microcosm of our body by virtue of their relationship with the totality of these elements in the macrocosm. If this is true regarding these physical elements, how much more so must it be of the consciousness which is the fundamental building block of all existence?

This short excursion into the interconnected nature of reality perhaps provides the simplest compelling reason yet to understand the oneness of the whole of existence. In our human terms, it means that we are inseparably one with the rest of existence. So, in effect, *to hurt others is to hurt ourselves*. That is why sages of humanity have always advocated helping others; they understood that, essentially, there are no others, and all life is inseparably interlinked and interconnected. This is perhaps the highest moral and spiritual basis of sustainability. Lao Tzu, the great Chinese sage, calls it the integral way:

> *What is the Integral Way?*
> To study the teachings of the sages and seers;
> To dissolve all concepts of duality;
> To pour oneself out in service to others; and
> To remove all obstacles to understanding through inner cleansing!
> Practicing unconditional sincerity, humility, perseverance, adaptability, and
> Celebrating the equality of all things
> Evokes the response of the universe,
> And fills the seeker with Diving Light.
> To the ordinary being, others often require tolerance.
> To the highly evolved being, there is no such thing as tolerance,
> because there is *no such thing as other*.
> Such a being extends her goodwill in all directions.
> Her very existence benefits all things.[6]

Converting Karma into Karma Yoga

What transforms ordinary actions into *yoga*, a means of comm*union* with the Absolute? The Gītā explains that Karma yoga has three features that distinguish it from ordinary action:

1. *Dharma aviruddha karma* (7.11): Action unopposed to *dharma*, moral order.
2. *Īśvara arpaṇa buddhi*: Attitude of offering (all actions to) *Īśvara*, the Lord.
3. *Īśvara prasāda buddhi*: Regarding (fruits of action as) *Īśvara*'s grace.

---

[6]Adapted from Brian Walker, trans., *Hua Hu Ching: The Unknown Teachings of Lao Tzu* (New York: Harper Collins, 1994), 21, 29, and 18.

In the Gītā's abiding vision, selfless performance of actions as a service or as an offering to the Supreme *sustains* the cosmic order of the universe. In turn, such actions purify the mind and make it a fit vessel for the reception of self-knowledge which alone is the true means to spiritual freedom. Indian philosophy postulates that all actions produce results, visible or invisible (*dṛṣṭādṛṣṭa phala*), which are binding on the doer. Apparently, both the ignorant and the wise may do the same work, but the ignorant act with a selfish motive, and the wise act with pure motivation, without expectation of any personal, material gain (BG 3.25).

Spiritual liberation, *mokṣa*, lies in attaining freedom from the endless cycle of actions-effects–actions-effects. This is then the *skillfulness* in action—*yogaḥ karmasu kauśalam* (2.50). What constitutes the art of *karma yoga*? Do *right* actions as an *offering* to Īśvara, accepting all *results* as Lord's *grace*. Then, the actions will lose their binding effect. No higher teachings about actions exist. When actions are performed without expectation of personal gain, they result in the purification of the mind and prepare it to intuit the subtle truths about the ultimate purpose of one's existence—the attainment of spiritual freedom. Consider the following dictum from the Ṛg Veda,[7] one of the oldest wisdom texts in the world:

> आत्मनो मोक्षार्थम् जगत् हिताय च
>
> *Ātmano mokṣārtham jagat hitāya ca.*
> For one's own liberation and
> For the welfare of the world.

This dictum captures the essence of spirituality and sustainability splendidly: Self-knowledge flowering into the good of others, the *well-being of all beings*. The Vedas base their philosophy of universalism on the understanding that the whole existence forms one single unitary movement despite its apparent variegated diversity. In other words, the same Truth pervades in all and everything. What is the metaphysical basis of this understanding? It is just this: Every living being contains the same Divine spark. The knowledge, understanding, and abiding awareness of the Divine element in every living being is the very foundation of the ethics and spirituality of sustainability.

Conscientious Compassion

Compassion is the positive expression of the universal value of non-violence. In Buddhist psychology, compassion is the flowering of wisdom. Compassion born of wisdom can be called conscious compassion. American scholar and Theravada monk Venerable Bhikkhu Bodhi combines the two concepts of justice and compassion to form a distinct ethical ideal called "conscientious compassion." According to Bhikkhu Bodhi, "When compassion and justice are unified, we arrive at what I call conscientious compassion. This is compassion, not merely as a

---

[7]Cited in Karan Singh, *Hinduism* (New Delhi: New Dawn Press, 2005), 71. This dictum has also been adopted as motto of Sri Ramakrishna Mission.

beautiful inward feeling of empathy with those suffering, but a compassion that gives birth to a fierce determination to uplift others, to tackle the causes of their suffering, and to establish the social, economic, and political conditions that will enable everyone to flourish and live in harmony."[8] He warns us about the dangers of taking an instrumental view of people, products, and planet:

> The major threat that I see today lies in the ascendency of a purely utilitarian worldview driven by a ruthless economic system that rates everything in terms of its monetary value and sees everything as nothing more than a source of financial profit. Thus, under this mode of thinking, the environment turns into a pool of 'natural resources' to be extracted and turned into profit-generating goods, and people are exploited for their labor and then disposed of when they are no longer of use.[9]

If humanity is to avoid a horrific fate, Bhikkhu Bodhi concludes, a double transformation is necessary. First, we must undergo an "inner conversion" away from the quest to satisfy proliferating desires and the constant stimulation of greed and craving. But change is also needed in our institutions and social systems. Finally, Bhikkhu Bodhi suggests that people turn away from an economic order based on incessant production and consumption and move toward a steady-state economy managed by people themselves for the benefit of their communities, rather than by corporate executives bent on market dominance and expanding profits.[10] Essentially, the bird of change needs two wings to rise up and fly: One wing is *moral vision* and the other wing is a *commitment to action*. We need greater moral awareness of empowering values such as justice, equality, loving-kindness, compassion, self-restraint, and the necessity for constant struggle against injustice, violence, hatred, cruelty, self-centeredness, and narcissist self-indulgence. All great spiritual traditions remind us that the responsibility for creating such a world rests with us and not with others.[11]

Our Habits Are *Not* Us

We are all creatures of habits. And we are told that habits die very hard. Take the word "habit" itself, for example. If we remove "h," "a-bit" remains, and if we remove "a," "bit" remains. And finally, if we remove "b," "it" still remains! And the reason we are

---

[8]Raymond Lam, *Conscientious Compassion*—Bhikkhu Bodhi on Climate Change, Social Justice, and Saving the World. An e-Interview published in *Buddhistdoor Global*. Posted on August 14, 2015. Retrieved August 17, 2015: http://buddhistglobalrelief.me/2015/08/14/conscientious-compassion-bhikkhu-bodhi-on-climate-change-social-justice-and-saving-the-world/.

[9]Ibid.

[10]Ibid.

[11]Ven. Bhikkhu Bodhi, "On Hope and Hype: Reflections on a New Year's Tradition," *Buddhist Global Relief*. January 11, 2016. Retrieved January 20, 2016: http://buddhistglobalrelief.me/2016/01/11/on-hope-and-hype-reflections-on-a-new-years-tradition/.

not able to see the truth in "it" is because of the crooked, lower case "*i*." In other words, our *little pride* (small "*i*") prevents us from seeing the *big truth* of our habits.

In any change efforts, therefore, it is important to remember that our habits are *not* us. Our habits are the byproducts of the tradition we are born in and the sociocultural milieu we grow up in. And separating ourselves from our habits is the first step in growing out of them or overcoming them.

The second factor in overcoming some of our unwholesome habits is to be aware of what psychologists refer to as "confirmation bias." *It is very hard to agree with the truth that disagrees with us; it is even harder to disagree with the untruth that agrees with us.* To understand this is to guard against our confirmation bias. Generally, the path we take in the formation of our habits is not informed by much logic or research. Once formed, we keep defending our habits impulsively, blissfully oblivious of our confirmation bias. Confirmation bias ensures that when reason is against us, we turn against reason. We do not like to end up on the side of being wrong, given our emotional investment in our habits. Confirmation bias also dictates the *sources* of our search for facts, it determines the information we *select* from those sources, its *interpretation*, and the *conclusions* we draw from the selected evidence. Once we become aware of the operation of our confirmation bias, we begin to become free from its noose.

Our eating habit is also just that, a habit. Mindful of our confirmation bias, and armed with more research and awareness, we can make conscious choices about our food—choices that are good for us, good for the environment, and good for countless innocent creatures that get killed mercilessly every day for the sheer gratification of our taste buds. Real change is tough, and of course, *seeing* our defenses is easier than *changing* them. However, seeing through our defense mechanisms is an important first step in changing them. We need both engaged humility and patience to see through and overcome our pet habits and beliefs.

The Ethics of Eating: A Case for Vegetarianism

Many people are attracted to vegetarianism primarily for health and ethical reasons. There are at least three main reasons for anyone to turn to a plant-based diet: health, sustainability, and compassion. Let us take the health reasons first, for they furnish the most natural motivation. Research shows that eating red and processed meat increase the risk of cancer and heart disease.[12] A recent report from the WHO's International Agency for Research has indicated that bacon, ham, and sausages rank alongside cigarettes as a major cause of cancer, placing cured and processed meats

---

[12]Matt Rocheleau, In wake of study on processed, red meats, what should you do? *Boston Globe*, October 26, 2015. Retrieved January 20, 2016: https://www.bostonglobe.com/metro/2015/10/26/study-says-eating-red-processed-meats-can-cause-cancer-what-should-you/gHfuGjmhYc3Gat0rDzllNK/story.html.

in the same category as asbestos, alcohol, arsenic, and tobacco.[13] Processed meat refers to meat that has been salted, cured, fermented, smoked, or undergone other processes to enhance flavor or to improve preservation, according to the WHO. However, shifting to a meatless diet for health reasons alone may not give our resolve its stick-to-itiveness that only a deep compassion can.

Compassion is the highest emotion and greatest value. The journey to compassion involves five distinct steps: antipathy, epathy, sympathy, empathy, and compassion. Our dignity as humans should lie in protecting those who are weaker than us. Those who have more power ought to be more kind to those who are weak. All spiritual traditions teach us not to do to others what we do not want to be done to us. The compassionate basis of a vegetarian diet lies in the understanding that no living being wants to get hurt or to die, thus making harmlessness a universal value. Our self is the dearest of all to us. Love of self comes as a natural endowment, instinctually rooted in self-preservation. This awareness can help foster "live and let live" way of life.

The teachings of Vedānta and Buddhist psychology can go a long way to help us understand the essential oneness and interconnectedness of all life. When we truly realize the same Truth in everyone and everything, we become compassionately mindful of our total footprint on the planet. And we begin to have correct valuation of things. This leads to a profound change not just in our behavior, but in our being as well. We start seeing the terror of the situation more vividly—at our cellular level.

In today's factory farming system, animals have no legal protection from cruelty, which would be illegal if it were inflicted on our pets. Yet farmed animals are no less intelligent or capable of feeling pain than are the dogs and cats that we cherish as companions. Moreover, this cruelty to animals is not environmentally sustainable. In chapter two, we have seen that raising livestock for meat comes at a very high cost to the environment. In fact, recent research indicates that livestock industry produces more greenhouse gas emissions than all cars, planes, trains, and ships combined.[14] Let us be careful not to *upset* the very *setup* carelessly, in the name of progress.

---

[13]Sarah Boseley, Processed meats rank alongside smoking as cancer causes—WHO. *The Guardian*, October 26, 2015. Retrieved January 20, 2016: http://www.theguardian.com/society/2015/oct/26/bacon-ham-sausages-processed-meats-cancer-risk-smoking-says-who. Also see Suzanne Wu, Meat and cheese may be as bad as smoking: Eating animal proteins during middle age makes you a candidate for cancer, *USC News*, March 4, 2014. Retrieved January 22, 2016: https://news.usc.edu/59199/meat-and-cheese-may-be-as-bad-for-you-as-smoking/.

[14]Rob Bailey, Antony Froggatt, and Laura Wellesley, "Livestock—Climate Change's Forgotten Sector: Global Public Opinion on Meat and Dairy Consumption." A Research Paper. Chatham House, the Royal Institute of International Affairs, London: December 2014.

Throughout the history, many great thinkers have recognized the salutary effect of a vegetarian diet on human temperament. For example, we have Einstein's testimony:

> Although I have been prevented by outward circumstances from observing a strictly vegetarian diet, I have long been an adherent to the cause in principle. Besides agreeing with the aims of vegetarianism for aesthetic and moral reasons, it is my view that a vegetarian manner of living by its purely physical effect on the human temperament would most beneficially influence the lot of mankind.[15]

Alan Watts, a British-born philosopher, writer, and speaker, best known as an interpreter of Eastern philosophy for a Western audience, when asked why he was a vegetarian, famously quipped: "I am a vegetarian because cows scream louder than carrots."[16] Life feeds on life, Alan Watts knew very well. But he was awakened to the deeper truth of existence—that all killing involves pain! And one should minimize the pain, as much as possible. To the list of great thinkers and immortals of pen who became vegetarian as a matter of choice, we can add such luminaries as Plato, Leo Tolstoy, Gandhi, and George Bernard Shaw.

Meet Dave Scott, a U.S. triathlete and the first six-time Ironman Triathlon Hawaii Champion (1980, 1982, 1983, 1984, 1986, and 1987).[17] During peak training times, his highly regimented routine included cycling 75 miles, swimming 5000 meters and running up to 20 miles every single day. Widely considered to be one of the most difficult one-day sporting events in the world, an Ironman Triathlon format consists of a 2.4-mile (3.86 km) swim, a 112-mile (180.25 km) bicycle ride and a marathon 26.2-mile (42.2 km) run, raced in that order and without a break within a strict time limit of 17 hours It is reported that in his bid for super-discipline, Dave Scott took his training regimen a few notches higher and used to *rinse his cottage cheese* with water to get extra fat off. What is even more remarkable is that, while training for triathlons, Dave Scott followed a *strict vegetarian diet*.[18]

Another great example of the power of a vegetarian diet is Hawaii legend Ruth E. Heidrich. After she was diagnosed with breast cancer, she switched to a completely vegan diet. With a strenuous exercise routine, a vegan diet, and an

---

[15]Alice Calaprice, *The New Quotable Einstein* (New Jersey: Princeton University Press; Enl. Commemorative Ed., 2005), 281. Translation of letter to Hermann Huth, December 27, 1930. Einstein Archive: 46–756.

[16]Retrieved January 20, 2016: https://answers.yahoo.com/question/index?qid=20110220230000AAK4KO3.

[17]Jimmy Watson, Ironman Dave Scott knows what will be on his tombstone, *The Times*, August 2, 2015. Retrieved November 24, 2015: http://www.shreveporttimes.com/story/sports/2015/07/31/ironman-dave-scott-knows–tombstone/30933751/.

[18]See Dave Scott (triathlete) entry in *Wikipedia*. Retrieved November 24, 2015: https://en.wikipedia.org/wiki/Dave_Scott_(triathlete).

affirming mental outlook, Ruth not only overcame the cancer, she went on to become an award-winning, record-breaking triathlete.[19] Ruth has run six Ironman triathlons, over 100 triathlons, and 66 marathons. In 1999, she was named by *Living Fit* magazine as one of the 10 fittest women in America. She still actively competes in marathons and triathlons, having won more than 900 trophies and medals since her diagnosis of breast cancer in 1982 at the age of 47.

By way of spiritual rationale of vegetarian diet, we present the following excerpt based on author's meeting with a contemporary sage, Muni Narayana Prasad:[20]

Q: Can a Self-Realized person be non-vegetarian?
Muni: A Self-Realized person realizes that the same Truth is in everyone and sees his or her own very self in others. Therefore s/he cannot harm others, since that will be harming one's own self. Hence, the value of non-harming, *ahiṃsā*.
Q: So, it cannot be otherwise?
Muni: Yes! It is so.[21]

The Power of Individual Will

The problem of sustainability is so vast and pervasive, the argument goes, what can an individual do? What difference can one person really make? Gandhi's life is a living testimony to the fact that individual will and reason can affect social and political change.[22] As human beings, we are given the power to think and power to do. We are also given the power to choose, the proverbial free will. We can choose to live differently and create our own reality. This is perhaps the most unique gift we have that needs to be harnessed and realized, as the following Sioux tale amply illustrates.

---

[19]See Ruth E. Heidrich, *A Race for Life* (New York: Lantern Books, 2000). See also Ruth E. Heidrich, *Lifelong Running: Overcome the 11 Myths about Running and Live a Healthier Life* (New York: Lantern Books, 2013).

[20]Muni Narayan Prasad is a contemporary teacher of Vedānta in the tradition of Narayana Guru. If you travel in the South Indian state of Kerala, you will find Narayana Guru's statues everywhere. He led a reform movement in Kerala, rejected casteism, and promoted new values of spiritual freedom, humanity, and social equality. Although better known as a social reformer, Narayana Guru was an original thinker of Advaita Vedānta and a poet of highest caliber. The spiritual tradition founded by Narayana Guru continues till today, with Muni Narayana Prasad, who is the disciple of Nataraja Guru and Guru Nitya Chaitanya Yati.

[21]*Meetings with Remarkable People*: Muni Narayana Prasad. Unpublished Interview Transcript: December 22, 2015.

[22]See: Joan V. Bondurant, *Conquest of Violence: The Gandhian Philosophy of Conflict* (New Jersey: Princeton University Press, 1958/1988), 28; Satinder Dhiman, *Gandhi and Leadership: New Horizons in Exemplary Leadership* (New York: Palgrave Macmillan, 2015).

> ### We are the Architects of our Destiny
>
> *The Creator once gathered all of Creation and said:*
> *"I want to hide something from the humans until they are ready for it.*
> *It is the realization that they create their own reality."*
> *The eagle said, "Give it to me, I will take it to the moon."*
> *The Creator said, "No. One day they will go there and find it."*
> *The salmon said, "I will bury it on the bottom of the ocean."*
> *"No. They will go there too."*
> *The buffalo said, "I will bury it on the Great Plains."*
> *The Creator said, "They will cut into the skin of the Earth and find it*
> *even there."*
> *Grandmother Mole, who lives in the breast of Mother Earth, and who*
> *has no physical eyes but sees with spiritual eyes, said, "Put it inside of*
> *them." And the Creator said, "It is done."*

Vasudhaiva Kutumbakam—The Entire World as One Family

In the Vedic vision, for the magnanimous, the entire world constitutes but a single family (*udāracaritānām tu vasudhaiva kuṭumbakam*).[23] When we see unity in diversity, it helps us develop universal outlook in life which is so essential to sustain the sanctity of our war ravaged planet. By developing universal pity and conscious compassion toward all and everything, one is able to make peace with the world and feel at home in the universe.

We have to clearly understand that runaway economic growth is no longer an option. We either secure, or discard, our place in the biosphere. And this is not some idealistic, romantic notion. It is preparation for a profounder life which is dramatically different from the one we are living now.

---

[23]*Mahōpaniṣad*—VI.73 (a). Alternative rendering: 'For those who live magnanimously, the entire world constitutes but a family.' See: Dr. A.G. Krishna Warrier, trans., *Maha Upanishad* (Chennai: The Theosophical Publishing House, n.d.). Accessed: July, 31, 2015: http://advaitam.net/upanishads/sama_veda/maha.html.

While we are "busy putting on our oxygen mask first," let us not forget that a larger system provided us with that oxygen mask to begin with. Let us seek and share the underlying truth of mutuality that does not lead to self-centeredness and unnatural differences and disharmony. That is the truth of our identity behind diversity—the essential oneness of all that exists. By seeking the truth that is equally good to all existence, we will be able to revere all life and truly redeem our human existence. Only then can we ensure equally the happiness and harmony of all beings. That will be our true gift of sustainability to the universe.

Creative Altruism Versus Destructive Egocentrism

Matthieu Ricard in his recent book titled *Altruism: The Power of Compassion to Change Yourself and the World* (2015) presents a vision revealing how altruism can answer the key challenges of our times: economic inequality, life satisfaction, and environmental sustainability. With a rare combination of the mind of a scientist and the heart of a sage, he makes a robust case for cultivating altruism—a caring concern for the well-being of others—as the best means for simultaneously benefiting ourselves and our global society.

Ricard notes that Daniel Batson was the first psychologist to investigate rigorously whether real altruism existed and was not limited to disguised selfishness.[24] He notes the emphasis placed by Darwin on the importance of cooperation in nature and emphasizes the fact, as evidenced by coming together of human spirit during times of catastrophe, that human beings are essentially "super-cooperators." He summaries his view stating that

> Altruism seems to be a determining factor of the quality of our existence, now and to come, and should not be relegated to the realm of noble utopian thinking maintained by a few big-hearted, naïve people. We must have the perspicacity to acknowledge this and the audacity to say it.[25]

Richard cites decades of research conducted by the American psychologist, Tim Kasser, highlighting the high price of materialist values.[26] Representative studies spread over twenty years have shown that individuals who concentrated their existence on wealth, image, social status, and other materialistic values promoted by the consumer society are less satisfied with their existence. They are in less good health than the rest of the society….Even in sleep their dreams seem to be infected with anxiety and distress. Thus, in so far as people seem to have adopted the "American dream" of stuffing their pockets, they seem to that extent to be emptier

---

[24]Ibid., 6.

[25]Ibid, 11–12.

[26]Cited in Ricard, *Altruism*, p. 9. See: Tim Kasser, *The High Price of Materialism* (Cambridge, MA.: MIT Press, 2003).

of soul and self.[27] Tim Kasser goes on to show how desires or needs to have more or consume more are deeply and dynamically connected with feelings of personal insecurity.

In a foreword to Tim Kasser's book, *The High Price of Materialism*, Richard M. Ryan points out that the cultural climate of consumerism makes everyone vulnerable to what he calls "affluenza," an infectious disease in which everyone gets addicted to having more. He calls it "the tragic tale of modernity—we are the snakes eating our own tales."[28] Noting the widely held view by humanistic and existential thinkers such as Abraham Maslow, Erich Fromm, and Carl Rogers—that *focus on materialistic values detracts from well-being and happiness*—Ryan recounts that Kasser highlights how materialism actually contributes to unhappiness:

> Desires to have more and more material goods drive us into an ever more frantic pace of life. Not only must we work harder, but, once possessing the goods, we have to maintain, upgrade, replace, insure and constantly manage them. Thus in the journey of life, materialists end up carrying an ever-heavier load, one that expends the energy necessary for living, loving and learning—the really satisfying aspects of that journey. Thus materialism, although promising happiness, actually creates stress and strain.[29]

Nevertheless, recent advances in neuroscience confirm the experience of thousands of years of contemplative practice that individual transformation is possible through training and practice. Any form of mind training induces a restructuring in human brain at both the functional and structural levels. This is also, Ricard contends, what happens when one trains in developing altruistic love and compassion.[30]

Human Activities: Prime Driver of Climate Change

> *When the real enemy is within, why fight an external war?*—Gandhi

Calling the post-1950s the *Anthroposene* (literally, the "era of humans"), Ricard Matthieu tells us that this is the first era in the history of the world when human activities are profoundly modifying and degrading the entire system that maintains life of earth. He states that the wealthy nations are the greatest culprits: An Afghan produces two thousand five hundred times less CO_2 than a Qatari and a thousand times less than an American.[31] With a note of urgency, Ricard rightly observes,

> If we continue to be obsessed with achieving growth, with consumption of natural resources increasing at its current exponential rate, we will need three planets by 2050.

---

[27]See: Tim Kasser, *The High Price of Materialism* (Cambridge, MA.: MIT Press, 2003), xi.

[28]Ibid., xii.

[29]Ibid., xi.

[30]Ibid, 10.

[31]Matthieu Ricard, *Altruism: The Power of Compassion to Change Yourself and the World*, trans. by Charlotte Mandell and Sam Gordon (New York: Little, Brown and Company, 2015), 8.

> We do not have them. In order to remain within the environmental safety zone in which humanity can continue to prosper, we need to curb our endless desire for "more."[32]

Likewise, observations throughout the world make it clear that climate change is occurring, and rigorous scientific research demonstrates that the greenhouse gases emitted by human activities are the primary driver.[33]

These conclusions are based on multiple independent lines of evidence, and contrary assertions are inconsistent with an objective assessment of the vast body of peer-reviewed science. Moreover, there is strong evidence that ongoing climate change will have broad impacts on society, including the global economy, and on the environment. For the United States, climate change impacts include sea level rise for coastal states, greater threats of extreme weather events, and increased risk of regional water scarcity, urban heat waves, Western wildfires, and the disturbance of biological systems throughout the country. The severity of climate change impacts is expected to increase substantially in the coming decades.[34]

The message of these studies and reports is clear: If we are to avoid the most severe impacts of climate change, emissions of greenhouse gases must be dramatically reduced. In addition, adaptation will be necessary to address those impacts that are already unavoidable. Adaptation efforts include improved infrastructure design, more sustainable management of water and other natural resources, modified agricultural practices, and improved emergency responses to storms, floods, fires and heat waves.[35]

Conclusion

Recently, we have seen religious leaders such as the Dalai Lama, the Theravada monk Bhikkhu Bodhi, and Pope Francis speak boldly about ecological responsibility, greater social justice, and growing poverty. On December 12, 2015, we also saw 195 countries adopt the first universal climate agreement during United Nations

---

[32]Ibid.

[33]See: Climate Change 2007: Synthesis Report. Retrieved August 19, 2015: http://www.ipcc.ch/publications_and_data/ar4/syr/en/spm.html.

[34]The conclusions in this paragraph reflect the scientific consensus represented by, for example, the Intergovernmental Panel on Climate Change and U.S. Global Change Research Program. Many scientific societies have endorsed these findings in their own statements, including the American Association for the Advancement of Science, American Chemical Society, American Geophysical Union, American Meteorological Society, and American Statistical Association. See below: Statement on climate change from 18 scientific associations (2009).

[35]Statement on climate change from 18 scientific associations (2009). Retrieved August 18, 2015: http://www.aaas.org/sites/default/files/migrate/uploads/1021climate_letter1.pdf.

Conference on Climate Change held during November 30–December 11, 2015, in Paris, France. The dignitaries from 195 nations exclaimed: Long live the Planet. Long live the Humanity. Long live life itself.[36] This is all good news and should be applauded. However, the real grassroots change will occur only through the spiritual transformation of each one of us.

We recapitulate some of the opening questions for this concluding chapter and furnish some answers, as minimum working hypotheses. Which ethical value is the most conducive to sustainability? It is the universal value of compassion—non-harming in thought, word, and deed. What is the greatest spiritual principle informing sustainability? Oneness—it is the awareness that the same Truth resides in everyone and everything. The Dalai Lama put it succinctly: "We need to garner a sense of the oneness of the 7 billion human beings alive today."[37] And what is the single most important action we can undertake at the individual level which is good for us, good for all living beings, and good for the sanctity of the planet? It is transitioning to a plant-based diet.

Sometimes it takes a simple message that acts as a catalyst for change and new beginnings. It could just be the realization that "we need plants; plants do not need us." We can survive in perfect health without meat. We will die within a couple of months without plants. And we are told that plants are found only on planet earth. What a blessing! The biggest intervention we could make toward reducing our carbon footprint would not be to abandon cars, but to switch to a plant-based diet.

We conclude this final chapter with a poem which encapsulates the key message of living a sustainable life on several counts. It is a clarion call to reassess our *total footprint* on the planet. The poem emerged spontaneously as the author walked one day by an old oak tree, which greeted him with its characteristic urgency and poignancy. A slow reading of the poem can perhaps do what scores of sustainability reports cannot. It can help us in making a transition from being a consumer to becoming a contributor. This is the minimum each one of us can do for our fellow human beings and our planet. This may indeed be our best hope—our only hope—for securing our common future. *Only sustainability today—rooted in moral awareness and spiritual vision, with a pledge of action at the individual level—will ensure a sustainable future for all.*

---

[36]See Conference of the Parties: Adoption of the Paris Agreement. Retrieved January 29, 2016: http://www.cop21.gouv.fr/wp-content/uploads/2015/12/l09r01.pdf.

[37]His Holiness the Dalai Lama Talks to the Japan Doctors Association April 4th 2015. Retrieved January 30, 2016: http://www.dalailama.com/news/post/1258-his-holiness-the-dalai-lama-talks-to-the-japan-doctors-association.

Conversations with a Tree!

Today during morning walk,
I paused near a wise old tree;
It greeted me, as always, gently;
Unassumingly with an inviting look!

I have heard it whisper,
as I pass by it, everyday:
"I produce oxygen;
What do you?"

Today, there was urgency in its voice,
As if it had lots of questions for me;
That needed to be addressed;
As a matter of life and death!

Still kind in its manner,
Gentle in its demeanor;
Solemn in its voice,
The tree continued....

Rain or sunshine,
Extreme cold or hot;
I bear my lot, patiently;
Without complaining or comparing!
Do you?

By way of my own care and concern,
I need very little on a daily basis.
Always making sure to contribute,
More than I consume.
Do you?

I offer my gifts of shade and shelter,
Anonymously and generously;
And my fruits and flowers,
To all and sundry, selflessly!
Do you?

I am content in being the way I am,
Without needing to compare or compete;
To outshine or be better than the next tree;
In the mindless race called success!
How about you?

I abide placidly in the present;
Without brooding over the past,
Or pining for the future;
Living fully in the Now, authentically!
Do you?

On a yearly basis at least,
I renew myself:
Letting go of the old leaves;
To make room for the new ones!
Do you?

I do not hate my fellow trees,
Nor do I destroy my own kind.
Merely because they are different,
Or hold a different viewpoint!
How about you?

My virtues are: Patience, Generosity,
Acceptance, Forbearance, Caring,
Compassion, Contribution, Usefulness,
Selflessness, Sustainability, Self-renewal!
What are yours?

With my drab, rough exterior,
I stay nimble and pliant inside.
Always ready to adapt and to cater:
Whatever circumstances transpire!
Do you?

I genuinely hold my head high,
Upright in my humility and gratitude;
Always glorifying my Creator,
By serving selflessly Its Creation!
Do you?

In life and in death,
I stay valuable, making sure that
Every part of me is somehow useful,
For the sake of others!
How about you?

My leaves, my stem,
My roots, my bark;
All parts of the Divine Exchange,
You humans call Eco-System.
How about yours?

Even when I die,
I am of service to you;
As firewood to keep your house warm,
And to cook your supreme meal!
How about you?

Above all, I have the
Virtue of Eternal Silence,
And never get bored
with my own existence!
How about you?

As I listened to this wise old tree,
I kept wondering:
What have I done to the Garden
Entrusted to my care?!