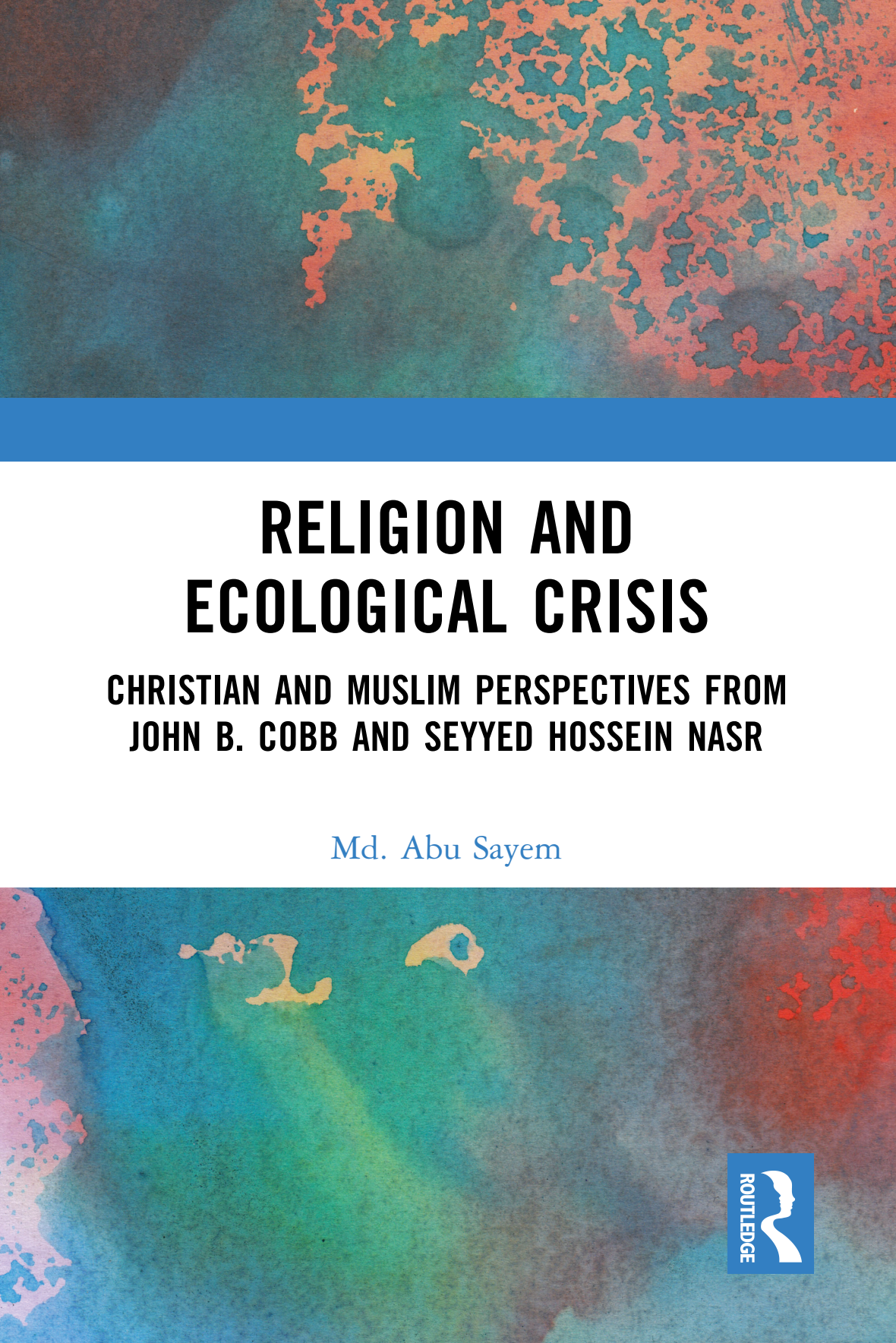




RELIGION AND ECOLOGICAL CRISIS

CHRISTIAN AND MUSLIM PERSPECTIVES FROM
JOHN B. COBB AND SEYYED HOSSEIN NASR

Md. Abu Sayem



“Religious voices must be included in the global response to the ongoing environmental crisis and impending climate catastrophe, which threaten all life on earth. People of faith, under the influence of certain theological dogma, have contributed to the current situation, but by reflecting on the human condition and sacredness of life and natural processes, religious devotees may also play a significant role in stemming the tide of ecological degradation and possibly reversing some destructive trends. This book invokes two prominent scholars – one Christian, one Muslim – who have been warning us about the doom we face if we do not change our ways, but whose admonitions have gone largely unheard by the general public and even the majority of their own respective co-religionists. Md. Abu Sayem’s ambitious yet well-intentioned effort to bring the views of John B. Cobb and Seyyed Hossein Nasr into dialogue on the most important problems of our time will not save the world by itself but may present a useful step in increasing awareness of the imminent need to act.”

James D. Frankel, *Associate Professor of Religious Studies and
Director of the Centre for the Study of Islamic Culture,
Chinese University of Hong Kong*

“This book is an excellent study of two leading figures in the field of religion and ecology. Cobb and Nasr each made significant contributions from Christianity and Islam respectively. Md. Abu Sayem has created a valuable analysis of their thought that includes a wonderful balance of appreciation and critique.”

Mary Evelyn Tucker, *Yale Forum on Religion and Ecology*

“For more than a half century now scholars have been pointing out that the worsening environmental situation originates in a crisis not of technology but of values, of which religions remain the primary source. This book provides a sympathetic yet critical assessment comparing the contributions made by a pair of environmentalist thinkers representing the world’s two largest religious traditions, Christianity and Islam. The author’s choice to focus on the works of Christian theologian John B. Cobb and Muslim philosopher Seyyed Hossein Nasr not only highlights the seminal contributions of these two important individuals, but helps to illuminate more general issues pertaining to the problems and possibilities inherent in the project of deriving an ecological reading of the two religious frameworks that inform their thought.”

Richard Foltz, *Professor of Religions and Cultures,
Concordia University, Montréal, Canada*

“This monograph is focused on a critical examination of the forces of economism and scientism that has subjected planet Earth to a triple crisis involving climate change, loss of biodiversity and all-consuming

pollution. Abu Sayem has dug deep into John B. Cobb's eco-theological vision and Seyyed Hossein Nasr's eco-spiritual vision and helped us to make sense of the approaches, the former from a Christian perspective and the second from an Islamic, to get to grips with our current predicament. In this he has succeeded admirably and I commend this work not only to future budding researchers who may wish to engage with this subject but also to the lay public who may recognise in this approach the hope it can give to saving us from the emerging enormities."

Fazlun Khalid, *founder Islamic Foundation for Ecology and Environmental Sciences*

"Given the huge impact of religions on humanity across cultural spheres, the urgency of exploring eco-religious perspectives should be abundantly evident in the 21st century. In *Religion and Ecological Crisis*, Md. Abu Sayem faces the challenge head on in the case of two world religions, Christianity and Islam, and analyses John B. Cobb's "ecological model" and Seyyed Hossein Nasr's "sanctity of life" model, respectively. Furthermore, he discusses the pros and cons of these models in a comparative manner, illuminating their potential to make a difference both in the field of ecological sustainability and inter-religious dialogue. I would warmly recommend this book to anyone involved in either field of study, or both."

Ville Päivänsalo, *ThD, Senior Lecturer, Diaconia University of Applied Sciences (Diak), Helsinki*

"Congratulations to Dr. Sayem for this important and much needed work, especially as the world is looking for different means to address the multitude of crises, we are living through including the triple planetary crisis of climate change, ecosystem degradation and pollution. What is important about this work is the repeated messages by both Cobb and Nasr that the root causes to our current challenges is an ethical, moral, and spiritual one. This has been the focus of recent work by the Faith for Earth Initiative of UNEP and has seen many conferences focusing on this issue. Dr. Sayem's work is certainly valuable in providing much food for thought. What is also interesting in Dr. Sayem's work is the conclusions that we are basically in one boat together regardless of our religious background. This has been demonstrated by the common conclusions of both Cobb and Nasr, although using two different approaches. While the work on religions and ecology has grown substantially over the past few years, it is notable that the voices of religions are still not too loud or not enough as opposed to secular ones, especially at international and intergovernmental fora. The work of Dr. Sayem is a substantive addition and contribution to making the case for inter and intra-faith dialogue and

cooperation for the benefit of the people and the planet. Thank you for this important and rich monograph.”

Dr. Iyad Abu Moghli, *the founder and director of the United Nations Environment Programme (UNEP) Faith for Earth Initiative*

“This valuable monograph compares the eco-theological approaches of the first pioneers of ecotheology in Christianity and Islam respectively which is to say the North American process theologian John B. Cobb, who taught at Claremont Colleges, California, and the Iranian Sufi philosopher Seyyed Hossein Nasr who taught at Harvard University. Professor Sayem provides a fascinating inter-religious profile of Cobb and Nasr which is both expository and helpfully critical in tone. There is no other study along these lines, the book is very readable, and I highly commend it.”

Michael Northcott, *Professor Emeritus of Ethics at the University of Edinburgh*

“Dr. Md. Abu Sayem’s present work is an excellent introduction to two world class thinkers, Seyyed Hossein Nasr from the Islamic tradition and John B. Cobb from the Christian tradition, as they understand the root causes of the ongoing environmental crisis and envision the ways out of it. People of all religions stand to benefit from the many profound perspectives of Nasr and Cobb shared in this scholarly work.”

Dr. Tarik M. Quadir, *author of Traditional Islamic Environmentalism: The Vision of Seyyed Hossein Nasr*

“Healthy ecosystems are home to many species, and also to many religions, theologies, and philosophies. In *Religion and Ecological Crisis*, Md Abu Sayem offers a crystal-clear comparison of two of the most influential religious thinkers on the environment, John B. Cobb and Seyyed Hossein Nasr. Sayem’s approach is really a double comparison, connecting Cobb’s process thought to Nasr’s perennialism, as well as assessing the distinctively Christian and Muslim components of each thinker’s vision. The result is a complex, generous presentation that will inform and inspire all its readers”

Dan McKanan, Emerson Senior Lecturer, Harvard Divinity School

“In his book, *Religion and Ecological Crisis: Christian and Muslim Perspectives* from John B. Cobb and Seyyed Hossein Nasr, Dr. Abu Sayem has presented the spiritual roots of the modern ecological crisis. By focusing on Christianity and Islam, the Author demonstrates how traditional views of nature, provided a more sustainable and functional relationship between humans and the environment.”

Mehdi Aminrazavi, Professor of Philosophy and Religion, University of Mary Washington



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Religion and Ecological Crisis

Religion and Ecological Crisis delves into the complex relationship between religions and ecology, presenting Christian and Islamic perspectives on ecological issues through the work of John Boswell Cobb and Seyyed Hossein Nasr. It examines how faith traditions of the world see and respond to our current unprecedented climate change issues.

This is the first comparative study of Cobb and Nasr's eco-religious understanding and explores how their prescriptions can contribute alternatively to techno-scientific initiatives in environmental sustainability. Taking Cobb's "economism" and Nasr's "scientism" as the key concepts for surveying the roots of the ecological crisis, the book offers interdisciplinary and interreligious insights into the debates about ecological equilibrium, motivational awareness in human mind, and entanglements between religion and the environment.

This will be an insightful resource for policy makers, faith leaders, and academics working in Environmental Studies and Religious Studies.

Md. Abu Sayem is an Associate Professor in World Religions and Culture at the University of Dhaka. His research interest includes religions and environmental issues, human responsibilities to nature, eco-religions, eco-theology, eco-spirituality, ecological equilibrium, moral traditions and environmental sustainability, ecological justice, eco-Islam, multifaith dialog on ecological crisis, environmental ethics, multifaith initiatives for reducing environmental problems, religions and environmental problems in Bangladesh, etc.



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Christian and Muslim Perspectives
from John B. Cobb and Seyyed
Hossein Nasr

Md. Abu Sayem

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Our Lord! You have not created (all) this without purpose...

Quran, 3:191

And to Allah (almighty God) belong all that is in the heavens and all that is in the earth. And Allah is Ever Encompassing all things.

Quran, 4:126

And to Allah (almighty God) belong the East and the West, so wherever you turn there is the face of Allah.

Quran, 2:115

The seven heavens and the earth and all that is therein glorify Him and there is not a thing but glorifies His praise. But you understand not their glorification. Truly, He is Ever Forbearing, Oft-Forgiving.

Quran, 17:44

In order that you do not transgress due balance. And observe the weight with equity and do not make the balance deficient. And the earth He (Allah) has put down (laid) for the creatures.

Quran, 55:8–10

Corruption has appeared throughout the land and sea by what the hands of humans have earned, He (almighty God) will let them taste part of (the consequence of) what they have done, perhaps they will return to right actions.

Quran, 30:41

But ask the animals, and they will teach you; or the birds of the air, and they will tell you; or speak to the earth, and it will teach you; or let the fish of the sea inform you. Which of all these does not know that the

hand of the Lord has done this? In his hand is the life of every creature and the breath of all mankind.

Job, 12:7–10

Hear the word of the Lord, you Israelites, because the Lord has a charge to bring against you who live in the land: There is no faithfulness, no love, no acknowledgement of God in the land. There is only cursing, lying and murder, stealing and adultery; they break all bounds, and bloodsheds follow bloodsheds. Because of this, the land mourns, and all who live in it waste away; the beasts of the field and birds of the air and the fish of the sea are dying.

Hosea, 4:1–3

Let the heavens be glad, and let the earth rejoice; let the sea roar, and all that fills it; let the field exult, and everything in it.

Psalms, 96:11

Since the roots of our trouble are so largely religious, the remedy must also be essentially religious, whether we call it that or not.

White (1967:1207)

To be at peace with the Earth one must be at peace with Heaven.

Seyyed Hossein Nasr (1976:14)

The whole universe is one vast ecological system.

John B. Cobb, Jr. (1972:113)

*Dedicated to those who have attempted to restore and
revitalize a harmonious relationship between nature and
human beings through the connection of God.*



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Abbreviations

ARC	Alliance of Religion and Conservation
BAS	Bulletin of the Atomic Scientists
BCRPWA	Berkley Center for Religion, Peace and World Affairs
CE	Common Era
CNG	Compressed Natural Gas
CPS	Center for the Process Studies
CUHK	Chinese University of Hong Kong
DoE	Department of Environment
FORE	Forum of Religion and Ecology
GDP	Gross Domestic Product
GISS	(NASA's) Goddard Institute for Space Studies
GNP	Gross National Product
GOs	Governmental Organizations
IPCC	(UN's) Intergovernmental Panel on Climate Change
IPE	Interfaith Partnership for the Environment
ISEW	Index of Sustainable Economic Welfare
LPG	Liquefied Petroleum Gas
MIT	Massachusetts Institute of Technology
NAS	(U.S.A's) National Academy of Sciences
NASA	National Aeronautics and Space Administration
NCIPL	North Carolina Interfaith Power & Light
NGOs	Non-Governmental Organizations
RNGOs	Religious Non-Governmental Organizations
SDGs	Sustainable Development Goals
UN	United Nations
UNEP	United Nations Environmental Program
UNESCO	UN Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNU – EHS	United Nations University – Institute for Environment and Human Security
WCC	World Council of Churches

Acknowledgments

Bismi(A)llāhir Raḥmānir Raḥīm (In the name of Allāh ([almighty God], the Most Gracious, the Most Merciful). *Assalāmu ‘Alaykum wa-Raḥmatu(A)llahi wa-Barakāthuhu* (may the peace and blessings of Allah (God) be upon you).

One of the precious sayings of Prophet Muhammad (peace be upon him): “He who is not grateful to people, is not grateful to God” (*Tirmidhi*, Hadith No. 1954) highly inspired me to become thankful to those who helped me at any form. Here my acknowledgments begin with glorifying God because I believe that it was God’s very especial blessing on me that I became able to produce a monograph from my Ph.D. Dissertation. The present book is an outcome of my intellectual endeavor, which was developed over the years of my doctoral studies at the Chinese University of Hong Kong from 2016 to 2020, and some portions of which were published in form of research papers by some peer-reviewed journals before publishing this monograph. Needless to say, the contributions of some persons and institutes to this process were directly and indirectly involved, which oblige me to acknowledge them.

I am deeply thankful to my Ph.D. supervisor Professor Lai Pan-Chiu in Religious Studies at the Chinese University of Hong Kong (CUHK) for his relentless support from getting the admission to accomplishing the dissertation. Without his strong recommendation, it was very difficult for me to get the Hong Kong PhD Fellowship Scheme (HKPFS) 2016–2017 to support my doctoral studies. His intensive supervision made me qualified for the Degree of Doctor of Philosophy. With these, Professor Lai obliges me to be grateful to him forever.

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I am thankful to Professor John B. Cobb, Jr. and Professor Seyyed Hossein Nasr for their scholarly comments on some parts of my dissertation and for their valuable time (especially their willingness to be interviewed). I would like to thank Dr. Tarik M. Quadir, Dr. Omosulu Rotimi, and Dr. Ian Mevorach for giving me an opportunity to read their Ph.D. dissertations. I am grateful to Professor Farhan Nizami, the Founder-Director of the Oxford Centre for Islamic Studies, for his encouragement to make this study more readable for non-academics. I express my heartiest gratitude to Dr. Peter Youngblood and Dr. Ruslan Yusupov Solaiman for going through the dissertation and for continued cooperation in finalizing this. Dr. Peter and Dr. Ruslan are my two best friends and I always remember their sincerity toward me.

My Ph.D. Dissertation research project would not be possible without funding, so my deepest thanks go to the University Grants Committee (UGC) of the Hong Kong Government for offering a Hong Kong Ph.D. Fellowship Scheme (HKPFS) award and to the Chinese University of Hong Kong for a conditional offer of a Postgraduate Studentship (PGS) before the confirmation of the HKPFS. If the University of Dhaka – where I teach in the Department of World Religions and Culture – had not granted me a three-year study leave, I could not have begun my dissertation project, so I am grateful to the University of Dhaka for granting me the required leave with payment.

I should thank International Cooperation in Education and Research (OeAD-GmbH) for granting me an Ernst Mach-Fellowship award (from November 2018 to July 2019) as a visiting Ph.D. student in Religious Studies at the University of Vienna. My special thanks go to Professor Lukas Pokorney of Religious Studies and Professor Angela Kallhoff of Ethics at the University of Vienna for their cooperation. I acknowledge the support of the Department of Religious Studies at the University of Vienna, which helped me complete the first draft of my dissertation.

I cannot forget the great sacrifice of my beloved wife Dr. Jibon Nesa and our two affectionate daughters Sarah Maliha Sayem and Amina Maria Sayem during my doctoral studies at the Chinese University of Hong Kong. I can realize how much suffering Dr. Jibon Nesa had to tolerate in Dhaka in my absence, it is not possible to compensate for those days of pains and troubles with any other things. Despite those untold sufferings, she continued her

strong support and encouraged me to accomplish the dissertation project in due time. I cannot express how deeply our daughters missed me and I missed them. Without the strong support of my wife, I cannot come to this level. My deepest thanks to my wife for expanding her continuous support and unfailing inspiration, and my sincerest gratitude to our both daughters for their prayers for quickly accomplishing the work. I also extend my thanks to my parents, parents-in-law, and all other nearest and dearest ones of my relatives for their sincere prayers and good wishes.

My profound gratitude to Professor Lai Pan-Chiu and Professor Seyyed Hossein Nasr for writing prefaces, to Professor John B. Cobb, Professor İbrahim Özdemir, and Professor Katherine Marshall for writing forwards, and to Professor James D. Frankel, Professor Mary Evelyn Tucker, Professor Richard Foltz, Professor Michael Northcott, Dr. Iyad Abu Moghli, Professor Ville Päiväsalo, Sheik Fazlun Khalid, Dr. Tarik M. Quadir, Professor Dan Mckanan, and Professor Mehdi Aminrazavi for writing the promotional blurbs and endorsement comments. Every one of them spent much time reading the monograph manuscript and promoting my humble effort. I am deeply indebted to them.

My heartiest gratitude is also to those ones whom I forget to mention here. Keeping all these valued cooperation and support in my mind, I sincerely pray to God for all these persons and institutions for their, directly and indirectly, involvement with me during my work in the Dissertation. May God grant them the best reward here and hereafter for their different sorts of assistance. *Alḥamduli(A)llāh* (all praise is due to Allāh, Lord of all the worlds), almighty God blessed me with this book publication.

Preface

I intend to tell you briefly a big story of how the idea of addressing the present environmental issues by connecting religions came to my mind. Seven years ago from now, it was in June 2015, as a Ph.D. student at the University of Dhaka (Bangladesh), I attended the Bergen Summer Research School (BSRS) of the University of Bergen (Norway). In that year, the BSRS held a leadership training program for some selective Ph.D. students on the theme of “Sustainable Developments Goals and Cultural Transformation.” This summer program instilled in me the academic value and significance of researching on environmental sustainability from a religious perspective. I recall the encouraging words of Professor Rune Nilsen (Professor Emeritus of Global Health at the University of Bergen) who worked as the scientific director of BSRS 2015. On the way to an excursion as a part of the summer school program, sat by Professor Nilsen on the bus and we talked about some important issues of our current ecological crisis. I was very much influenced by his inspirational words that academicians in the discipline of religious studies should play vital roles in growing a deeper awareness in the human mind of ecological sustainability. At one point, he suggested me to work on environmental issues by connecting religious moral teachings in these. Truly speaking, my active participation in BSRS 2015 and Professor Nilsen’s scholarly advices brought to my mind some important ideas for further thought on religion and environmental issues. After then, I diverted my concentration from a pure theological field to an interdisciplinary field like religions and environmental problems. I searched some world-famous universities in Asia, Europe, and North America for my doctoral research on ecological issues from religious perspectives. Finally, in 2016, I had an opportunity to work with Professor Lai Pan Chiu (my Ph.D. supervisor) and James D. Frankel (my Ph.D. co-supervisor) on religion and environmental issues as a Ph.D. student in Religious Studies at the Chinese University of Hong Kong (CUHK). In order to join this Ph.D. program, I had to cancel my earlier Ph.D. enrollment with the University of Dhaka.

Over the years from 2016 to 2020 I had to work hard to fulfill the requirements of a Ph.D. in Religious Studies. My course papers were prepared in a way that these were transformed later into some chapters of the

dissertation, which were published in some index (peer-reviewed) journals as research papers with required modification. Before submission of my final thesis to the Graduate School for the Degree of Doctor of Philosophy, I was blessed with some published journal articles, which were actually based on the chapters of my Ph.D. dissertation. Now I am going to publish my whole dissertation as a monograph. Some might ask why I am republishing published articles as different chapters in a monograph like this. In response to this query, it suffices to argue that there is a demand in the market and the wider academic world to see my Ph.D. dissertation as a published book, which should be based on my recent and relevant published papers, in order to address some questions and queries already offered by some scholars in the field. Keeping this pertinent point in mind, I did take almost one year for receiving some feedbacks from the readers of my published papers to enrich my current monograph, where I attempted my best to address the valued comments of my readers and accommodate their scholarly suggestions. That is why this initiative was taken. I hope this effort will be appreciated by my readers.

At the very beginning, this monograph project was a challenge for me. Now it is my contentment that I have completed this project and gained new academic skills. I expect that some people will find the reading of this work helpful. I am sorry that I could not overcome some other limitations and deficiencies, and I hope my readers will not be put off by my weakness in presentation and academic English writing. My readers will be the real evaluators of this work. Their constructive criticisms, comments, and suggestions will be appreciated for further revision.

In a few places, I have used some non-English words. All foreign words are used in italic form (for example, *khaliḥfa*). In the romanization of foreign words, I have followed the 1997 edition of the ALA-LC Romanization Table: Transliteration Scheme for Non-Roman Scripts. As for the citations in texts, notes and references, and in making the bibliography, I have followed the Publication Manual of the American Psychological Association (APA) 6th edition. According to APA (6th edition), the author's surname and year of publication (and in some places page numbers) are noted within brackets in the body of text and also in notes. In reference and the bibliography, cited works are arranged alphabetically with the surname of the (first) author, year of publication, title of the book/journal (in italics), place of publication, and page number in the case of journal articles and book chapters.

As for organization, I have used general numbers, for instance, 1., 2., 3., for the indication of chapters. In the text, the main headings are kept **bold** and the sub-headings are made *italic* with **bold** to show difference between them and also respective connection with them. My original Dissertation was structured into eight chapters, but the present monograph is transformed into six chapters so that readers cannot feel bore with reading this study. In the Dissertaion, the second chapter deals with Literature Review and the third chapter addresses Methodological Issues, Research Approach and Conceptual Foundations, which are incorporated briefly in the first chapter of

this monograph. If anyone wishes to see these in details, they are requested to read the original Dissertation.

As told before, some parts of this monograph have already been published by some referred journals, I am grateful to the editors of the journals for permitting me to reproduce the contents in this monograph. At the same time, I appreciate the Graduate School of the Chinese University of Hong Kong for allowing and inspiring research students to publish their dissertations. However, the below-mentioned papers were based on my dissertation and my present monograph is partially developed on their revised versions:

Sayem, Md. Abu (2018), A Scientific World-View of Nature and Environmental Problems with a special Concentration on Seyyed Hossein Nasr's Understanding of Environmental Sustainability, *Journal of Islam in Asia*, 15(2), 312–328.

Sayem, Md. Abu (2019). Religions and Environmental Ethics: A Comparative Study of John B. Cobb, Jr. and Seyyed Hossein Nasr, *Australian Journal of Islamic Studies*, 4(3), 34–50.

Sayem, Md. Abu (2019), The Eco-Philosophy of Seyyed Hossein Nasr: Spiritual Crisis and Environmental Degradation, *Islamic Studies*, 58(2), 271–295.

Sayem, Md. Abu (2019), Environmental Crisis as a Religious Issue: Assessing some relevant Works and Activities on the Field, *Asian Journal of Theology*, 33(1), 127–147.

Sayem, Md. Abu (2021), Building Eco-theological and Bio-centric Approach to Environmental Ethics: John B. Cob's Perspective, *Religió: Jurnal Studi Agama-agama*, 11(1), 26–49.

Sayem, Md. Abu (2021), Religions and Environmental Sustainability: Focusing Some Practical Approaches of John B. Cobb, Jr. and Seyyed Hossein Nasr, *Australian Journal of Islamic Studies*, 6(1), 65–80.

Sayem, Md. Abu (2022), The Eco-Religious Understanding of John B. Cobb, Jr. and Seyyed Hossein Nasr: A Comparative Study, *Islamic Studies*, 61(1), 47–64.

Associate Professor Md. Abu Sayem
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Preface

Both the ecological crisis and Christian–Muslim dialog are important academic issues of public concern. There are many scholarly publications on either one of them, but it is very rare to combine them together. Dr. Sayem’s book makes an innovative contribution by viewing the ecological crisis from the perspective of Christian–Muslim dialog.

This book attempts to articulate a dialog on ecological issues between John B. Cobb, Jr., an influential Christian theologian, and Seyyed Hossein Nasr, a renowned Islamic scholar. It is rather interesting to note that these two scholars are so famous in their own fields that they heard about each other, but they have no direct dialog with each other before. In view of this, Dr. Sayem interviews Cobb and Nasr, respectively, in order to know their views on the relevant issues and on the other scholar. Based on the publications by or about these two intellectuals as well as the two valuable interviews conducted, Dr. Sayem critically and creatively compares their views on a wide range of issues related to religion and ecology, including their views on God, nature, humanity, science, technology, and the root(s) as well as possible solution(s) of the ecological crisis.

As a pioneering attempt to engage these two scholars in dialog on environmental issues, this book will benefit scholars and students who are interested in Cobb, Nasr, Christian-Muslim dialog, or religion and ecology.

Professor Pan-chiu Lai

Department of Cultural and Religious Studies,
The Chinese University of Hong Kong

Preface

It is not usual for a person about whose thought a work is written to write a preface for it, but Dr. Md. Abu Sayem, whom I advised during the process of writing the present book, asked me to compose a few words as a preface for it. I could not but accept especially in light of the fact that the work is also concerned with the thought of my old friend Prof. Cobb. He and I came to the field of environmental studies in relation to religion from different directions, he from religious studies and I from modern science especially physics, to the awareness of and interest in this all-important field.

Already in the early 1950s when I was a physics student at M.I.T., I came to realize that modern science neglects a whole dimension of the reality of the world of nature and that its ever-greater application in the form of modern technology was destroying an ever more and devastating extent the harmony and balance of nature. This issue became a central intellectual and existential concern for me and remains so to this day. After finishing my Ph.D. at Harvard with a thesis devoted to the Islamic conception of nature, I returned to Iran and continued to lecture and write in both Persian and English on subjects dealing with man's relation to nature. Some of those works caught the attention of the famous Roumanian scholar of religion Mircea Eliade with whom I became friends, and he asked me to deliver the Rockefeller Series Lectures at the University of Chicago where he was teaching. I accepted his invitation and gave four lectures in 1966 in Chicago the text of which soon appeared as *The Encounter of Man and Nature: The Spiritual Crisis of Modern Man*. It was at first criticized by many Christian writers but soon gained much popularity appearing in several later editions such as *Man and Nature*. It is still in print and read widely and, moreover, has been translated into several European languages.

This work was, however, singularly neglected in the Islamic world itself and not translated into any Islamic languages, including my mother tongue Persian, until decades later. Gradually, however, interest in the environmental crisis and its relation to Islamic religion, philosophy, and culture began to rise in many major Islamic countries, especially Iran, Turkey, Pakistan, Malaysia, and Indonesia, and *Man and Nature* as well as many of my other writings on this subject began to be translated into various Islamic languages. A new

generation of Muslim scholars devoted to this field have since appeared in the Islamic world itself and also among Muslims living in the West.

Dr. Abu Sayem belongs to this generation of Muslim scholars. His doctoral thesis, which now appears as the present book, reveals his knowledge of Islamic teachings in this field as well as environmental studies by Western scholars. His book, based on a comparative study of the thought of Prof. Cobb and myself, is a demonstration of his awareness of this field in both the Islamic world and the West. It should, therefore, be of interest to both Western and Muslim scholars engaged in this subject. Although the environmental crisis in its present form began in the industrialized West, it is now a global issue. The environmental crisis is not confined by political boundaries. The pollution of New England rivers affects aquatic life in the Arctic and the pollution in Brazil has already left its mark on Patagonia and the southern Atlantic regions. When it comes to the environmental crisis we are all in the same boat together. I hope that the present book will bring about greater awareness of this reality and that this book that is being published in English will also become available in Islamic languages including Bengali, the language of Bangladesh from which the author hails, a low-lying land that is now existentially threatened by the consequences of this crisis that is causing among other tragedies the rising of the sea level everywhere.

Seyyed Hossein Nasr
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Foreword

Almost everyone today has some concern about the deterioration of the climate. This is indeed a critical issue. But even if we found technological means of keeping the destructive consequences in bounds, the deeper problem is that people behave insensitively with respect to how their actions affect the natural world. Our civilization would remain unsustainable.

In the modern world, a radical dualism between human beings and the rest of the world has played a large role. Human beings are thought to be ends, the rest, means to their livelihoods, enjoyment, and power. Since we did not value nature in itself, we hardly noticed the damage we were doing to it. Finally, in the late sixties, we could ignore this no longer. We learned that our lifestyle and customary actions were unsustainable, that is, they were destroying the world on which we depended for life itself.

Suddenly people wanted to know where this self-destructive worldview came from and how it had gained power over us. It was a time when secular people delighted in blaming religion for all the world's problems. So, the separation of human beings from everything else and the reduction of everything else to exploitation was blamed on religions, especially the theistic ones that developed in and out of Israel.

Jews, Christians, and Muslims had to admit that their typical emphases had indeed been anthropocentric. Further, they had allowed this to take the extreme form of modern secular dualism with little protest. But many of us did not see this dualism as characterizing the sources and norms of our beliefs. We found in those sources ample reason for deeply and sensitively caring for what God had created. The main problem was that we had yielded much too quickly to alien ideas. We needed to repent, but we would do better to recover the roots of our faith than to toss them out.

In the last century more Muslims and Christians have come to understand each other and learn from one another. But the process of healing from centuries of mutual enmity is slow. Perhaps the best way of becoming friends and allies is to work together on the world's great problems. And perhaps today the world's great problems include the relation of humanity toward the nonhuman world. Perhaps we can both recognize that both of us are called more strongly than ever before to heal the wounds that humans have inflicted

on the Earth and to cease inflicting them. Perhaps we can both repent of our failures in the past and seek to learn together how now to proceed. Perhaps working together to restore God's creation to health will be the best way to experience as brothers serving the same God.

Md. Abu Sayem was one of many Muslim thinkers who thought that Muslims should be more faithful to the Quran, not less. He looked for companions in this fresh appropriation of sources. He chose for special attention the work of the Islamic scholar and thinker, Seyyed Hossein Nasr. And I am honored that he chose me as his example from the environmentally concerned Christian community. He studied our writings with great care and represented our thought accurately and sensitively. I personally owe him a great debt.

He showed that the implications that I derive from the Bible and Nasr derives from the Quran are so similar that our differences need not divide us in our commitment to saving the Earth. Christians and Muslims can work together. If hundreds of millions of us do so, the Earth's problems would be overcome. Of course, that is not likely to happen. But happily, there are many who are eager to cooperate and can derive support from this book. Today there are many Christians and many Muslims who want to give up the rivalry that even led to enmity and hatred and to work together in the service of the one God who created all and loves all.

What we agree on is directly relevant to the climate crisis, but it prepares us to respond to a whole range of crises toward which we move. Perhaps it will support those who want not only technological solutions but a cultural and spiritual change. Perhaps by becoming more profoundly loyal to our sources, we can lead in the deep changes required for human civilization to become sustainable.

This book makes clear that some Muslims and some Christians think about these matters in quite similar ways. I feel keenly the kinship to Muslims who seek the same outcome. Both communities are profoundly indebted to Md. Abu Sayem for this book.

Let us give thanks to Md. Abu Sayem for his leadership.

Professor (Emeritus) John B. Cobb, Jr.
Claremont School of Theology
California, USA

Foreword

When Rachel Carson was busy writing her seminal book *Silent Spring* in the early 60s, she never dreamed that this small book would trigger a spirit of care for the environment in the world as she was fighting cancer on the one hand and the pesticide lobby in her own country, the USA. Almost a decade later, medieval historian Lynn White's groundbreaking philosophical exploration of "The Historical Roots of our Ecologic Crisis" (*Science* 155: 1203–1207) challenged Judeo-Christian Tradition for our unprecedented surfacing of ecological crisis. The article tacitly accepted Carson's main argument that our ecology is collapsing, but it blamed and criticized the idea of domination of nature in the Old and New Testaments. Therefore, the article has become the most cited piece of writing within the theological debate about environmental degradation and the role of humans. The central thesis of the article was that "[Western] Christianity is the most anthropocentric [human-centered] religion the world has seen." Then, he concludes that the modern technological conquest of nature that has led to our environmental crisis has in large part been made possible by the dominance in the West of this Christian worldview. Christianity therefore "bears a huge burden of guilt."

Although the article triggered a fierce debate and discussion among theologians, environmentalists, and scientists, it caused academia and religious authorities to look at their tradition with a green lens a few decades later. In other words, Abrahamic Religions, with the instruments provided by hermeneutic philosophy (especially Heidegger and his pupil Gadamer), began to reflect on their sacred text and tradition to form a new which resulted in rich and fresh perspectives for Jews, Christians, and Muslims.

Professor S. H. Nasr was the first Muslim thinker to respond to White's main argument with a different counterargument. He articulated that it was not perennial wisdom or sacred text which encourages humanity's aggressive project to dominate and exploit nature and causes our environmental degradation and loss of meaning but modern secular, materials, positivistic, and modern reductionist philosophy. This secular philosophy destroyed our physical environment and devastated our spiritual well-being,

too, as it cut off outbound with the second as it denies any metaphysical meaning of the phenomenal world. Nasr always encouraged young Muslim scholars and activists to discover the ecological spirit in the text of The Qur'an and articulate and base their environmental conciseness on the very foundation of the text.

Then, it began to dawn on the modern Muslims' minds that, when the Qur'an has been revealed to Prophet Muhammad over twenty-three years, first and foremost, it presented a new way of life to the people of Arabia: a way of understanding and marking time, a way of relating to the environment, to human beings, to family, and, most importantly, a new way to relate to God. Thus, the Qur'an shaped the Muslim perception of nature from its earliest revelations.

When the Qur'an is studied chronologically and systematically as revealed to the Prophet, it can be seen from the first early revelations "... makes frequent and repeated statements about nature and natural phenomena." Doing so revolutionized the pre-Islamic perception of nature as it awakened the senses and subtle inner faculties of people, providing early Muslims with a new vision of the universe and nature.

In doing so, the Qur'an challenged the polytheism of the pagan Arabs by referring to nature as an assembly of orderly, meaningful, and purposeful phenomena. Moreover, as Fazlur Rahman says, "nature having a firm and well-knit structure with no gaps, no ruptures, and no dislocations" is regarded as "one of the grand handiworks of the Almighty." Moreover, like a mirror, nature reflects its Creator's power, beauty, wisdom, and mercy. Nature is seen as a balanced, just, peaceful, unified pattern, created and sustained by God.

To summarize, in the Qur'anic Weltanschauung, God created the "heavens and earth and all in-between" from *ex nihilo* and with a purpose and meaning. Everything has been created with a specific order, duty, meaning, and purpose (Qur'an 38: 27; 3:190–191; 21:16–17; 23:115). God adorns the skies with the sun, the moon, and the stars; the face of the earth with flowers, trees, gardens, orchards, and animals. Moreover, God causes the rivers and streams to flow on the earth; upholds the skies, causes the rain to fall, and places the boundary between night and day.

When the pagan people of the time demanded proofs, signs, or miracles for the existence of God, the Qur'an's response is to direct their gaze at nature's complexity, regularity, and order. The early verses of the Qur'an, therefore, reveal an invitation to examine and investigate the heavens and the earth, and everything that can be seen in the environment: birds, sheep, clouds, seas, grapes, dates, olives, flies, the moon, the sun, fish, camels, bees, mountains, rain, wind—in short, all-natural phenomena. In short, the Qur'an makes it clear that everything in Creation is a miraculous sign of God (*ayah*), inviting human beings to contemplate the Creator. Non-human animals are explicitly included among God's miraculous signs, both in general and in terms of specific species (2:164; 7:73; 16:79).

This is how the Qur'an clarifies that the whole universe and everything in it are signs which are repeated two hundred and eighty-eight times in the Qur'an, pointing to something "beyond" them; something without which the universe, despite all its natural causes, would be nothing. Nature is "the theatre wherein is manifested His signs." In this way, the Qur'an invites humans to read the universe as signs of God (Q. 41:53; 51:20–21).

In the Quranic context, nature is a living, holistic, orderly, and perfect environment populated by angels, jinn, human beings, and animals. Above all, with all its causal processes, the universe is the prime sign and proof of its Creator and Maker.

Md Abu Sayem's new book, in the spirit of Nasrian ecological philosophy, presents us the potentiality of how religions can shape our perception of ourselves and the environment in a clear and well-written way. The book presents us with religious perspectives on ecological issues in connection with Christianity and Islam through studying, comparing, and to some extent contrasting the Whiteheadian-inspired Cobb's eco-theological vision with Nasr's eco-spiritual vision. Therefore, the book is promising and full of hope as pointing to a new horizon of understanding and cooperation among Abrahamic religions to respond to the challenges of ecological crisis and its profound moral and ethical implications. As Nasr underlines very often, the spiritual and moral decadence is also a product of secular and modern minds which lost their connection with the perennial wisdom.

As the current worldwide pandemic teaches us, the very nature of our problems requires a shared understanding and a mutual and coordinated action on a local and global level. It is not difficult to see that the book would encourage further studies on religions and environmental issues, such as climate change, sustainable development, and future generations' rights.

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Foreword

Commentary about the global ecological crisis vacillates between despair and hope. Polarized, often angry debates swirl. International gatherings promise action and highlight the compelling scientific evidence pointing to an urgent need for action. Plans are discussed and some financial commitments are made. Yet the summit outcomes leave astute observers skeptical as to whether the needed political will can emerge.

All too often, whether frozen to inaction by the magnitude of the challenge or turning aside, attitudes bordering on indifference seem to grip policy-making circles. Technical arguments are repeated ad nauseum, alongside horrifying data presented in vivid infographics, and photographs of humans suffering, visible pain and disruption of lives and cultures, and destruction of beautiful environments. Young and old present solutions that may be difficult and involve changes in the kinds of behavior (habits and comfort) that humans find least appealing, but that truly are feasible. We can do it, the optimists argue. But the solutions fall short of even the minimum needed.

What is needed, it seems with increasing force, is a compelling spiritual and emotional call that can shift attitudes and above all priorities. It needs to transcend selfishness, polarization, doubts, distractions, and tepid commitments. We know well that religious fervor, directed to positive ends, can bring about extraordinary changes in both communities and individuals. And there are examples of courageous and inspirational leadership coming from both special leaders, scholars, and intellectuals, and demonstrated action by communities themselves. Voices speaking from spiritual platforms can bridge divides, turn tepid timidity into focused courage, and bring seemingly irreconcilable ideas and communities together in harmony.

Bangladesh is at the epicenter of today's ecological crisis. Rising sea levels, changing climate conditions, powerful storms, and a large and growing population demanding food, shelter, space, and occupations illustrate the impact of changing climate more vividly than any other region. And Bangladesh is a country where religious beliefs color both the policy process and daily lives, even though their impact is often obscured behind anxiety about some extremist tendencies. Religious roles in the journey

Bangladesh has undertaken and on which it is now embarked draws on its culture and the religious inspiration of its people.

It is thus significant that Professor Sayem has set out to illustrate both dilemmas and possible routes toward solutions, seen through different religiously inspired teachings. His focus is on two leading scholars, one Christian and one Muslim, linked by their focus on the ways in which religious and spiritual values can and might shape responses to the ecological crises we face: John B. Cobb and Seyyed Hossein Nasr. It is a fascinating and illuminating exploration, one that comes at an important moment, when both Bangladeshi experience and scholarship and the teachings of religious scholars have central opportunities and responsibilities vis-à-vis the global agendas.

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1 Introduction: Orientation, Research Methodology and Significances of the Study

Introduction

This introductory chapter provides an overview of the discussions in the related research areas and clarifies why faith perspectives should be dealt with in addressing the present environmental problems. After introducing both John Boswell Cobb, Jr. (shortly “John B. Cobb” or only “Cobb” is used for the rest of the places) and Seyyed Hossein Nasr (shortly “Nasr”), it discusses how both scholars address ecological issues by connecting their respective faith traditions. An effort is made to provide some ideas of the research objectives, research focuses, methods and approaches, literature survey, research questions, rationale of the study, research materials, limitations, and some academic values of the research. With these points of the current study, and by referring to some of its other parts, the chapter aims to provide the necessary background information for the whole dissertation.

Background and Orientation

Despite the tremendous achievements of science and technology, religious moral values and virtues remain major factors in shaping human attitudes and behavior, including our environmental consciousness. Despite criticizing certain religious concepts (i.e., human supremacy over non-human animals) some scientists have realized the important role of faith and spiritual traditions (Gottlieb 2004: 653) in solving ecological crises. Though science provides analytical tools for better understanding these crises, it has no ethical or moral foundation to rectify human selfishness and reform human behavior toward the environment. Some scholars talk about using green technology and renewable energy sources in order to reduce environmental problems. Such post-modern initiatives may work to some extent, but a long-term solution requires a deeper understanding of the human–nature relationship and a participatory view of nature. A moral and ethical responsibility for nature is cultivated by faith and spiritual traditions, not by science and technology. Therefore, this project is going to

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explore religious perspectives on environmental issues by focusing on Cobb's Christian ecological views and Nasr's Islamic ecological thoughts.

Why Faith Perspectives Are Significant in Addressing Ecological Issues

In an open letter, scientists of the U.S. National Academy of Sciences (NAS) confirmed that we are facing an ecological crisis (Abraham 2016). This is echoed more elaborately in a recent report by the UN Intergovernmental Panel on Climate Change (IPCC), where leading world climate scientists warned of environmental catastrophe (Watts 2018; IPCC 2018). There has already been much discussion on how to manage the environmental crisis and minimize environmental degradation. In the humanities, scholars talk about environmental ethics (Benson 2000; Brennan and Lo 2010; Curry 2011; Vromans 2012). Environmental ethics is usually seen as the study of human moral obligation toward the environment. Both Cobb (1982 with Birch: 151, 153) and Nasr (1996: 273), among others, are not satisfied with this approach, arguing that it ignores the need to revitalize an inner spiritual relationship between humans and nature. Arguably, religions can inspire human beings to be better stewards of the environment, which few other disciplines can do. History has shown that religious teachings are able to effectively motivate personal attitude and behavior (Lai 2011a: 6). There is a close relationship between religion and the environment (Hope and Jones 2014: 57). Scholars in both the scientific and religious communities recognize such a deep connection between religious cosmological views of nature and ecological understandings of the environment (Tucker and Grim 2001: 9; Gottlieb 2004: 653). As a worldview, world religions can contribute to the development of "ecological ethical principles" (Lai 2011a: 12). It is not possible to deny the influential role of religious moral guidelines in the formation of certain ethical values (Tucker and Grim 2007). Religions' moral grounds for saving the environment should be more thoroughly explored.

Though some modern scholars have already approached this particular theme from their respective religious perspectives, such works are still insufficient given the gravity of the problem, and there has been hardly any effort to constructively *compare* such works for the benefit of the scholars, their respective faith traditions, and wider audiences. Further exploration is needed, from various angles, to connect faith and spiritual traditions with the ecological crisis. Hence this study rereads and compares two distinguished scholars of our contemporary period – John B. Cobb and Seyyed Hossein Nasr – through a critical study and reciprocal-illumination approach. Their theoretical discussions are not identical, but rather quite distinctive and thereby potentially complementary. By correlating Cobb's "ecological model" and Nasr's "sanctity of life" with present environmental concerns, this book explores why religious perspectives are significant in addressing

ecological disequilibrium, and how religious moral foundations and world-views of nature can motivate humans to restore the human–nature relationship and to modify their activities for the good of the environment.

John B. Cobb and His Work

John B. Cobb (1925–present)¹ is a theologian, philosopher, and environmentalist who is frequently cited as one of the most influential process theologians² of the twentieth century in North America. He belongs to the Wesleyan denomination of Protestantism. Cobb has written more than fifty books and nearly three hundred research articles.³ In his works, he connects theology with social ethics, ecology, and economics. A significant portion of his work focuses on ecological interdependence where he argues that the most urgent task of humans is to save the earth. Cobb (1972) proposes religious initiatives for dealing with the ecological crisis. He criticizes the present global economic practices and suggests ecology-based economics (Daly and Cobb 1989). He advocates a reconciliation between religion and science for the common interest of humans and the natural world (Birch and Cobb 1982; Sayem 2020c). Cobb also promotes multi-faith dialog on ecological ethics. He is co-founder of many initiatives, notably the Center for the Process Studies (CPS), the Process Studies Journal, the International Process Network, Progressive Christian Unity, and the Institute for the Postmodern Development of China. Recently, he co-founded Pando-Populous, aiming to create an “ecological civilization.”

Seyyed Hossein Nasr and His Work

Seyyed Hossein Nasr (1933–present)⁴ is a philosopher, Islamic scholar, and traditionalist. Despite his affiliation to the Shia community of Islam by birth, Nasr is highly respected by Sunni Muslim scholars.⁵ Nasr has authored over fifty books and more than five hundred articles.⁶ Nasr’s academic study is basically in physical science, but his works mostly deal with nature and environmental issues in connection with spirituality. His writings also include traditionalism and modernism, East and West culture and ideology, religion and secularity, spirituality and science, music and meditation, art and reflection, the profane and the sacred, philosophy, literature, history, and the environment. His deep knowledge of several multidisciplinary fields and his outstanding contributions to those fields make him a polymath (Irving 1979). Nasr attempts to prove that traditional knowledge has intrinsic value for human civilization, and suggests giving it equal importance with modern science in pursuing a sustainable continuation of human culture, art, religion, the environment and science (Sayem 2020d). Because of his innovative works on ecological philosophy and outstanding contributions to Islamic eco-religious understanding, Nasr is considered the “founding father of Islamic eco-theology” (Abdelzاهر and Abdelzاهر 2015: 4).

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How Cobb and Nasr Address the Current Environmental Crisis

In their works, both Cobb and Nasr discuss such fields of knowledge as metaphysics, cosmology, anthropology, philosophy, theology, and ecology; but their priorities regarding environmental sustainability are different. Cobb emphasizes a post-modern perspective based on an ecological model of life and development (Sayem 2020c), whereas Nasr focuses on a traditional approach based on sacred features of nature and the sanctity of life (Sayem 2020d). While Cobb bases his eco-theological understanding on process thought and ecological science (Sayem 2021c), Nasr bases his eco-philosophical and eco-spiritual understanding on perennial philosophy and eternal wisdom traditions (Sayem 2019b). Again, Cobb's approach adopts more practical steps for changing human behavior, but Nasr's approach takes a more spiritual view of nature, aiming to revitalize our human inner feelings for the natural world.

Research Objectives

The core objective of this project is to present an academic religious response to the current ecological crisis from the perspective of Cobb's Christian eco-theology and Nasr's Islamic one. Relatedly, it also aims to mutually illuminate and transform Christian and Islamic religious traditions through Cobb's and Nasr's interpretations of the God-human-nature relationship. This will help to cultivate a human spirituality of environmental sustainability through the revitalization of the religious and spiritual significance of nature, increasing personal and social awareness of the need for ecological equilibrium.

Research Methods: How this Book will Proceed

First Cobb's and Nasr's respective eco-religious visions are described. This is followed by a critical analysis of their views on special human dignity in an ecological context, their opinion of modern science and technology, their roles in protecting environmental degradation, their interpretations regarding the root causes of the ecological crisis, their theological approaches to public issues, and their positions on the existing approaches to environmental ethics. Finally, a comparative study of Cobb and Nasr is done by highlighting the similarities and dissimilarities in their eco-religious thoughts, investigating the contributing factors that have shaped those similarities and differences, evaluating the relative strengths and weaknesses of their positions, and exploring whether there is any ground for complementarity between them.

As far as the research methodology and the objective of the present study are concerned⁷, my stance is neither presupposing their claims as absolutely true nor completely rejecting any of their arguments. Being aware of

“indiscriminate comparisons,” the study tries to avoid “shallow, sentimental comparison and equations” (Nasr, 2001a: 49–50) and locate Cobb and Nasr in their due places. While analyzing their contradictory and opposing views, the researcher maintains an impartial position. With a spirit of discernment, the investigator analyses their arguments and claims critically on the given subject matter from a comparative and dialogical method using the reciprocal-illumination approach. Apart from this, the purpose of the current research is to offer a critical analysis on their understandings of the ecological crisis and their solutions for it, and then to contextualize these understandings within current religious and ecological issues.

The present study is very selective in following the said research methods and research approaches. By utilizing the comparative research method, our research puts Cobb in dialog with Nasr in order to develop a comparative picture of their eco-religious understanding and proposals. To accelerate this goal, the literary dialogical method is merged with the comparative study method⁸. As the current study sees both scholars’ viewpoints as mutually beneficiary for the ongoing discourse on environmental issues from religious perspectives, the reciprocal-illumination approach (Sharma 2005) is applied here.

Conceptual Foundations and Clarifications

Some terms and phrases like nature, natural environment, ecology, the environment, eco-theology, and eco-religion need some clarifications based on their conceptual backgrounds. In this section, we briefly review these frequently used concepts to distinguish them from similar terms and meanings. The term “nature” and “natural environment” may be misunderstood as identical, but there are certain distinctions between them. Nature implies the whole universe while the natural environment mostly implies the earthy environment. Nature also includes the character of a single thing, but the natural environment does not imply the inner feature of a single substance. The natural environment indicates what is situated around humans, which is affected by human activities, while nature implies the eternal law of the universe, which is unaffected by human-built environment. Nature is a more inclusive term while the natural environment is an exclusive term. Nature includes the totality of the universe and the inner characteristics of a thing or being, while the natural environment deals with some portions of nature. In the religious aspect, especially in Christianity and Islam, both nature and the natural environment are created and governed by God. In this study, the religious concepts of nature and the natural environment are taken as theoretical foundations in connecting religions with the present ecological disequilibrium.

The term “environment” may be seen as a synonym of the term “ecology,” but these two terms are not similar. The term “environment” is understood as the surrounding circumstances whereas the term “ecology” is

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meant as the relationship of the substances of the environment to one another and within themselves. More clearly, the physical substances are the environment while the relationships between biotic (organic) and abiotic (inorganic) substances of the environment and within themselves are called ecology. In fact, the present climate change issues come from the broken relationships between humans and all other (biotic and abiotic) entities in the environment, which indicates that ecological crisis is the crisis of relationships of the substances of the environment, which is mainly created by human uncontrolled activities in the environment. Ecological restoration lies, therefore, in maintaining that due relationships in the environment. Ecology can be compared with the inner side of a substance whose external manifestation is the environment. Put differently, if we consider a human being in this connection, the human heart can be compared with ecology and the human body with the environment.

When religious worldviews are consulted to guide human actions in nature, the term “ecology” seems suitable to deal with the problem. The term “ecology” is related to worldviews of world religious traditions than the term “environment.” Religious worldview comes from the metaphysical understanding of the interconnectedness of humans and nature, which is seemingly compatible with the understanding of ecology. So “ecology” is more connected with the religious worldview while “environment” is more related to the religious moral teachings or general ethical understanding of the natural world.

Like the term “environment,” the phrase “environmental ethics” refers to the moral principles or values of a person or a society to the environment, and similarly like the term “ecology,” the phrase “ecological ethics” refers to the moral principles or values of a person or a society to ecology. By “environmental ethics” it is generally understood why humans should behave with the physical entities of the environment as responsible humans, while by “ecological ethics” it should be understood why humans should maintain the existing relationships of the substances in the environment and within themselves.

If the term “theology” is taken as the systematic and rational study of the concepts of God, “eco-theology” is a form of constructive theology that focuses on the ecological relationship between humans and the environment in light of theological understanding. In Christian religious traditions, the term “eco-theology” seems a useful concept to denote the Christian religious moral guidelines regarding ecology, but for other religious traditions, this term seems not appropriate. In religions other than Christianity, it is better to use the term “eco-religion” to commonly mean the moral foundations of religions about ecology. In case of Islam, some scholars prepare to use the term “eco-Islam” to mean Islamic moral and ethical guidelines of ecology, which seems logical.

In reference to Cobb’s Christian environmental vision, the term “eco-theology” can be used, but in reference to Nasr’s environmental vision, the

term “eco-Islam” can be used to reduce further confusion, because, in Islamic religious tradition, the term “theology” is used for the Arabic term *Kalām*⁹ about which Nasr seems not an expert. When Cobb and Nasr are noted together, the term eco-religion/eco-religious understanding/vision/conception can be used to indicate their combined views of religious moral foundations of Christianity and Islam. In addition, like eco-theology, eco-religion grows a deeper awareness of human–nature relationship based on the religious understanding of the environment (Amsterdam Center for the Study of Lived Religion, n.d.).

Literature Review

In the existing literature related to original causes of environmental crisis, we notice many disputes about the basic background factors of our present environment. Antitheist theories: Materialism, Mechanism, and Naturalism degradation among scholars like Lynn White, Cobb, and Nasr.¹⁰ A major debate is whether religious concepts of human supremacy over other creatures are the chief cause, or – alternatively – whether the secular, scientific worldview is the greater problem. Simply put, the historical schism between secular modernity and Abrahamic religious traditions is the heart of the problem. This study is critical of both approaches. The present environmental crisis is a direct product of *many* consequences of modernity, so a multi-dimensional perspective is needed to solve this unprecedented problem. Guidance based on religious worldviews of nature may be one such perspective that reduces the current ecological crisis. As noted earlier, religions can motivate humans to control the activities that are harmful to both themselves and their environment, and therefore they are a factor in promoting environmental sustainability. Having considered this potential ground, the present work addresses environmental issues in light of the eco-religious thought of Cobb and Nasr.

Sources of Research Materials

Both primary and secondary sources are consulted. The extensive works of Cobb and Nasr regarding environmental issues (noted in the bibliography) are considered primary sources. Other books and journal articles on their thoughts and contributions to eco-religious thought are treated as secondary sources. In addition to these, some other recent works on eco-religion and environmental problems are referenced.

Chapter Outlines

This book is structured into six chapters. This introductory chapter presents a general introduction to the background and significance of this research. A short biographical description of John B. Cobb, Jr. and Seyyed Hossein

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Nasr is included for the purposes of a brief introduction to these scholars. The chapter presents the research method and approach with which this study is done. It clarifies the key terms, concepts, and theories frequently used in this book. By briefly reviewing existing literature, this chapter establishes the scholarly background of the topic and reveals the gaps in terms of the methodological issues and subject matters. In also highlighting the research objectives and questions, the introductory chapter helps justify the overall work's academic value and the need for further exploration.

The second chapter presents a brief summary of environmental issues and connects them to religious and spiritual traditions, particularly Christianity and Islam. By showing religious/spiritual-moral guidelines as supportive of environmental ethics and ecological initiatives, the chapter attempts to discursively unite religious and non-religious communities around the commonly shared problem of environmental degradation.

In the third chapter, Cobb's eco-theological understanding and proposals for environmental protection are discussed. Moreover, this chapter explores why and how Cobb addresses the ecological crisis within the context of the Christian religious tradition.

In the fourth chapter, Nasr's eco-philosophical and eco-spiritual thought is analyzed. Furthermore, the chapter exposes how Nasr connects Islamic moral guidelines on the natural world with modern environmental issues, and why his eco-religious understanding and proposals are relevant to the ecological crisis.

Since this study aims to present a comparative analysis between Cobb and Nasr in terms of their eco-religious understandings of environmental ethics, the fifth chapter focuses on this point. In this chapter, a comparison and appraisal of the given ideas of both eco-religious scholars are presented with the approach of reciprocal illumination. More especially, their thoughts on certain key points, for example, God's representation on earth, stewardship, sacredness of nature, the sanctity of life, human dominion over nature, love of God through the service of His creation, eco-theology, environmental ethics, spiritual feeling to the natural environment, everyone's consciousness about surrounding circumstances, controlling greed, etc., are explained and evaluated. The chapter clarifies whether these key ideas are compatible with the existing approaches to environmental issues or not. An effort is made to analyze the similarities and dissimilarities of their eco-religious approaches to environmental issues and their statements regarding human dominion over other creatures. The chapter also shows how Cobb and Nasr can illuminate each other's eco-religious understandings, and how Christians and Muslims can mutually benefit from their eco-religious understanding.

The concluding chapter presents a brief summary of the dissertation's findings by highlighting the completed research objectives and making a few conclusions. Based on Cobb's post-modern approach (along with his "ecological, biospheric and bioregionalism" model) and Nasr's traditional

approach (alongside his “sanctity of life”, “human–nature participatory” and “sacredness of nature” model), Chapter 6 makes some concrete suggestions on how Christian and Islamic understandings of the environment may be further mutually-illuminated through Cobb and Nasr. The concluding chapter also restates why this research is unique in comparing both scholars with one another in dialogical mode, and how it may inspire future studies. Apart from this, the conclusion notes some limitations of this dissertation’s conclusions and critically reflects on the author’s own growth throughout this project.

Limitation of the Study

Combining religions and environmental issues creates a vast field of study which cannot be surveyed comprehensively in the current research. Because of time constraints, the current research is focused primarily on a comparative study of Cobb’s Christian eco-theological view and Nasr’s eco-Islamic understanding.

It would be a more insightful study if not for time constraints. To be more specific, it would have been good to consult with other process theologians, so that we might have had a better contextual understanding of Cobb’s process theology. Similarly, it would have been good to include other scholars with views similar to Nasr’s traditionalism. As Cobb’s ecological model and biospheric vision are influenced by modern biology and ecology, it would also have been ideal to consult representatives of those fields. Cobb’s bioregionalism is also developed through criticizing modern economic theories and policies, thus further research in those areas could help confirm his accusations. Similarly, Nasr’s criticisms of modern science have been left largely unchallenged due to our lack of knowledge in the philosophy and method of science.

Both Cobb and Nasr refer to some texts that we were unable to read, and both scholars have work awaiting publication that may have offered further insight on our topic. We certainly hope future researchers can address the limitations of this study.

Significance and Expected Outcomes

As the current research covers Cobb’s process philosophical basis of eco-theology and Nasr’s perennial philosophical foundation of Islamic ecological thought, readers may be enlightened by both backgrounds. Cobb’s organic view of God in an inseparable relationship with the natural world encourages theologians and religious scholars to see the environment from a new perspective with a new feeling. Similarly, though in a different way, Nasr’s insistence on a traditional understanding of the God–human–nature relationship reminds us that we can reevaluate classical wisdom and theology as a means of repairing this broken relationship.

The present ecological crisis is a result of uncontrolled human desire and, arguably, modern humans are greedier than ever before. The consumeristic worldview and economic policies see humans as economic beings rather than ecologically friendly ones. This “economism” (a term Cobb uses) is a dominant cause of environmental destruction. To reverse this tendency, this dissertation will recommend Cobb’s alternative of “bioregionalism” as a way to reform a worldwide market based on selfish and destructive economic activities.

The scientific worldview of nature prioritizes transforming modern humans as physical beings, ignoring their spiritual characteristics, and seeing the natural world from materialistic and mechanistic points of view. This “scientism” (a term Nasr uses) contributes to the degradation of the natural environment. To rectify this attitude, this study will recommend Nasr’s “sacred science” and “traditional science” as a means for reconstituting humanity as spiritual as well as material and mechanical, encouraging greater responsibility toward the natural world.

Regarding environmental sustainability, modern humans seem far away from a foreseeable action plan, preferring short-term benefits and environmental exploitation. Considering this, this thesis focuses on Cobb’s biospheric vision and Nasr’s eco-spiritual vision as ways to see ecological issues from a deeply rooted human–nature relationship that involves ecological equilibrium.

Because we think “nature is dead and works like a machine,” this gives us justification to exploit it for economic and military benefits. By using modern biological science, Cobb argues that nature is living. Similarly, through metaphysics, Nasr also sees the natural world as a state of being, not simply mechanics. The current study will argue that Cobb’s and Nasr’s metaphors of life can rectify short-term, materialistic human thinking.

The present ecological crisis is also due to anthropocentrism, supported historically by Renaissance humanism and misinterpretations of the Judeo-Christian idea of human supremacy over non-human animals. By diverting from a human-centric focus to an eco-centric emphasis, this dissertation supports Cobb’s and Nasr’s critical views of human superiority and recommends thinking about human responsibility toward God’s creatures.

A techno-scientific ideology presents humanity as the owner of the Earth, leading to arrogance and tyranny. In contrast, some religious or spiritual teachings understand humanity as a “guest” on Earth, an idea that promotes humility. This thesis will deconstruct the tyrant mentality in favor of reconstructing the “guest” mentality.

The ecological crisis is nearing a point of no return where restoration will not be possible, and human behaviors must be quickly and permanently changed. This thesis will use Cobb’s “ecological asceticism” and Nasr’s “simplicity in lifestyle” themes as timely methods for doing so.

Needless to say, the Industrial Revolution brought great development but also massive environmental destruction, and our present industrialization-based global civilization triggers ecological crises year after year. A deindustrialization process seems crucial, but it also seems impossible; so we must think of alternative approaches to industrialization. This thesis will argue that Cobb's emphasis on green technology and renewable energy suggests the right area for scientists and eco-religious scholars to collaborate.

Humanity needs a new civilization that protects the environment by regulating human interaction with nature. Cobb is developing the idea of an "ecological civilization". This study will support that proposal, in hope that readers will take the idea of an "ecological civilization" more seriously.

But to implement Cobb's and Nasr's eco-religious prescriptions, a combined, multi-dimensional effort is needed. This thesis will focus on some of their practical suggestions and emphasize that what is needed is a multi-layered initiative that brings different kinds of people to a common platform for collaboration. More importantly, by comparing Christian and Islamic eco-religion through Cobb and Nasr, this work calls for multi-faith dialogs on ecological issues. Furthermore, it will recommend Cobb's and Nasr's eco-theologies as starting points for such dialogs.

As mentioned earlier, Cobb and Nasr are critical of environmental ethics. An investigation of their critiques is an important part of understanding the relevance of eco-religious or eco-theological ideas in the discourse of ecological crisis and restoration. By including such analysis, this dissertation will join the debate on the religious foundations of environmental ethics, and the continued role of faith in shaping such ethics.

With all of these key eco-religious themes and suggestions in focus, this thesis aims to foster awareness for the essentiality of ecological equilibrium and the role of faith in it. The hope is that readers will be inspired to keep themselves involved in environmental issues. But it is not just for scholars; wider society – the academy, religious institutions, religious leaders, community leaders, and policymakers – will benefit from the ideas and frameworks developed through a critical comparison of these two giants of religion and ecology.

Conclusion

The preceding points show what the present study is about, why it is done, and how it accomplishes the targeted goals. This introductory chapter also gives an idea of the resource materials being consulted, and the research methods being adopted. By pointing out chapter outlines, the present chapter provides an extraction of the research, and by foreseeing certain potentialities as to the values of the current work, it presents an idea of some significances and outcomes.

Notes

- 1 For biographical details, see Cobb (2014), *Theological Reminiscences*, Claremont, CA: Process Century Press.
- 2 Some other notable process theologians are Charles Hartshorne (1897–2000), Bernard Loomer (1912–1985), Marjorie Hewitt Suchocki (b.1933), David Ray Griffin (b.1939), Jay McDaniel (b.1949), C. Robert Mesle (b.1950), Catherine Keller (b.1953), Bruce Epperly (b.1952), and Monica A. Coleman (b.1974). Process theologians generally discuss theological issues from the perspectives of process thought. Process theology connects God with an active form of the world by understanding God organically rather than statically. A general characteristic of process theology is a denial of metaphysics which prioritizes God's "being" over God's "becoming." For details, see Cobb (2004), *Process Theology*, in Michel Weber (Ed.), *After Whitehead: Rescher on Process Metaphysics*, 212, Berlin: De Gruyter, Inc.; Bruce G. Epperly (2011), *Process Theology: A Guide for the Perplexed*, New York: T&T Clark; John B. Cobb Jr. (1980b), *Process Theology and the Doctrine of God*, *Bijdragen*, 41(4), 350–367; John B. Cobb, Jr. (1980a), *Process Theology and Environmental Issues*, *The Journal of Religion*, 60(4), 440–458.
- 3 For a theological biography of Cobb, see David Ray Griffin and Joseph C. Hough (Eds.) (1991), *Theology and the University: Essays in honor of John B. Cobb*, Albany, NY: State University of New York.
- 4 For a detailed biographical description, see Seyyed Hossein Nasr (2001b), *An Intellectual Autobiography*, in Lewis Edwin Hahn, Randall E. Auxier and Lucian W. Stone, Jr. (Eds.), *The Philosophy of Seyyed Hossein Nasr*, Chicago and La Salle, IL: Open Court, 3–85; Nasr and Jahanbergloo (2010), *In Search of the Sacred: A Conversation with Seyyed Hossein Nasr on His Life and Thought*, Santa Barbara, CA: Praeger, 1–59, 80–90.
- 5 Nasr should be kept away from the debate of Shia and Sunni. In Tarik M. Quadir's view, Nasr's Shia affiliation is not like an ideological Shia, because "he belongs to a Sunni Tariqah" and "he has the greatest respect for all of the first four khalifahs after Rasulallah (s.a.)," which is hardly found among Shia communities. Quadir argues further, "Nasr undertook extensive study of all branches of Islam with traditional ulema" and tried to be reflected by their spiritual knowledge. All these imply that Nasr is above Shi'ism and Sunnism. (Personal Communication, 31 January 2022).
- 6 For the account of his intellectual works, see M. Aminrazavi and Z. Moris (Eds.) (1994), *A Complete Bibliography of the Works of Seyyed Hossein Nasr*, Malaysia: Islamic Academic of Science.
- 7 For details of the research method and objective, see the third chapter ("Methodological Issues, Research Approach and Conceptual Foundations") of author's PhD Dissertation (Sayem, Md. Abu, *Religious Perspectives on Environmental Issues: A Comparative Study of John B. Cobb, Jr. and Seyyed Hossein Nasr* [PhD Diss., the Chinese University of Hong Kong, 2020], 43–68).
- 8 Ibid.
- 9 It generally refers to voice, word, speech, etc. In Islamic theological discussions, scholars (*mutakallimūn*, scholars of *kalām*) referred the term *kalām* to the Qur'anic phrase *kalām Allāh* (word of God). For details, see Md. Abu Sayem (2010), *The Monotheistic Concept in Judaism and Islam: A Comparative Study* (MPhil Thesis) (Dhaka: University of Dhaka), p. 129 and the endnote no. 41 (p. 150). For further details about Islamic theology, see Md. Abu Sayem (2012), *Islamic Theology: A Theoretical Analysis*, *The Arts Faculty Journal* (of the University of Dhaka), 6(8), (July 2012-June 2013), pp. 1–22; Md. Abu Sayem (2011), *The Monotheistic*

Concept in Judaism and Islam: A Comparative Study, Verlag: LAP Lambert Academic Publishing GmbH & Co. KG., 74–82.

- 10 For details on surveying relevant works, see the second chapter (“Literature Review”) of author’s PhD Dissertation (Sayem, Md. Abu, *Religious Perspectives on Environmental Issues: A Comparative Study of John B. Cobb, Jr. and Seyyed Hossein Nasr* [PhD Diss., the Chinese University of Hong Kong, 2020], 17–42), the contents of which are already appeared as Sayem, Md. Abu (2021d), Lynn White, Jr.’s Critical Analysis of Environmental Degradation in Relation to Faith Traditions: Is His “The Historical Roots of Our Ecological Crisis” Still Relevant? *Journal of Ecumenical Studies*, 56(1):1–23; Sayem, Md. Abu (2021e), A Survey Study of Recent Works on Nasr’s Eco-Religious Thought and Approach, *Journal of Islam in Asia*, 18(1), 231–250; Sayem, Md. Abu (2022), A Survey Study of Recent Works on John B. Cobb, Jr.’s Eco-theological Vision, *International Journal of the Asian Philosophical Association*, 15(1), 85–93.

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2 The Relevance of Religions to Ecological Crisis

Introduction

Since Industrial Revolution in Europe (most probably from 1760 CE to 1850 CE) humans have been increasing their uncontrolled actions in the environment, which has brought massive environmental problems to us. The present chapter gives a brief outline of major environmental issues and their contributing factors and then focuses on how religions are seen as relevant to these problems.

Major Ecological Crisis

Ecological crisis refers to the harmful effects of human activities on the ecological equilibrium. Since the Industrial Revolution in Europe (around 1760 to 1850), ecological destruction has escalated. Now, the world is experiencing more natural calamities than ever before.¹ *The Global Risk Report 2018* (World Economic Forum 2018) names ‘extreme weather events,’ ‘natural disasters,’ and ‘failure at climate-change mitigation and adaptation’ as the top global risks. Environmental problems like global warming, pollution, deforestation, ozone layer depletion, climate change, natural disaster, loss of biodiversity, melting polar ice, rising sea levels, etc. are having serious effects on our planet’s ecosystem.² Needless to say, human activities are largely responsible for this.³

Since the beginning of temperature recording in 1850, our world has been getting hotter (Brohan, Kennedy, Harris, Tett and Jones 2006). Global temperatures are now at their highest level in 4000 years (Gillis 2013). According to NASA’s Goddard Institute for Space Studies (GISS), the world is now about one degree Celsius hotter than the pre-industrial average (NASA Earth Observatory, n.d.). In a 2016 open letter, 375 members of the U.S. National Academy of Sciences, including 30 Nobel laureates, expressed their collective opinion that human activities are causing climate change and the world should take the necessary steps for environmental sustainability (Abraham 2016). The scientists state in the same letter that the climate is at a tipping point. In their view, the warming of the earth is

increasing to the point where it may be unstoppable. Similar anxiety is expressed in a report recently published by the UN Intergovernmental Panel on Climate Change (IPCC). In the report, the world's leading climate scientists warn humans that they have only a dozen years to keep global warming at a targeted level of 1.5 Celsius, otherwise, we may face catastrophe (Watts 2018; IPCC 2018).

Climate change is due to human activity, which has become more destructive as our species moved from an agricultural phase to an industrialized phase. People now depend primarily on dirty technology using massive amounts of fossil-based fuels, emitting excess greenhouse gases into the atmosphere. Consequently, our world is getting hotter, the ozone layer is still at risk, the polar ice caps are melting, and sea levels are rising at a faster rate. If this global warming continues, hundreds of thousands of people will become climate refugees due to rising sea levels submerging coastal areas. This is not to mention the complete destruction of coastal animal habitats. Concurrently, the indiscriminate consumption of fossil-based energy sources is creating an energy crisis for future generations. Similarly, other natural resources like water are also being used in unsustainable ways. If humans fail to tackle climate change, we will arrive at a point of no return where environmental catastrophe is inevitable.

The Ecological Crisis and World Religions

Needless to say, the current ecological crisis is a direct result of human selfishness. Since human actions relate to culture, our religious understanding of the human-nature relationship has a role in shaping our attitudes and behaviors. On this point, some scholars like White (1967) and Toynbee (1972) argue that religious understandings of human supremacy over non-human animals, especially Judeo-Christian views, are a fundamental cause of our current environmental problems. Such criticisms are refuted, of course, by scholars like Cobb (1972; 1994; 2007) and Nasr (1976; 1993; 1996), who instead argue that the religious and spiritual traditions of the world can have a positive role in reforming human attitudes and behaviors toward the environment.

Such debates between scholars are relevant for discussions of environmental issues from religious points of view. There are many problems, and they are impossible to solve through unilateral approaches, instead requiring cooperation from all sectors and disciplines, especially religious institutions and faith communities. Simply put, scientific communities, national governments, and international organizations cannot ignore the role religion can play in achieving environmental sustainability. There have already been productive joint initiatives between religious communities and other disciplines aimed at fighting the problem.

Environment as a Concerning Matter for Faith Communities

For Rockefeller and Elder (1992: 1), the present environmental degradation does not only pose a question of human existence but also portrays a great threat to all life. Both Rockefeller and Elder state the global ecological crisis as a moral and religious problem (1992: 1). They argue that the relationship of human beings with the natural environment is clearly mentioned in all religions (Branch 1993: 89). From their argument, it is understood that once human beings were disconnected and detached from spirituality or religious/moral teachings in terms of nature the ecological problems had started. If human beings forget the sacredness in nature, it is easy to consider nature as a machine for exploitation to extract benefits from there. In their work (1992), Rockefeller and Elder gather speeches of distinguished speakers, delivered at the 1990 symposium on the topic ‘Spirit and Nature: Why the Environment is a Religious Issue – An Interfaith Dialogue,’ representing Judaism, Christianity, Islam, Buddhism, Native American, and liberal democratic tradition (Branch 1993: 89). Considering the environmental crisis as their respective religious or moral issue, all speakers proposed interfaith dialog for the consultation on the environmental problem. For instance, a Jewish scholar, Ismar Schorsch, presents Jewish teaching “self-limited praxis” as a model for environmental sustainability (Branch 1993: 89). Islamic scholar, Seyyed Hossein Nasr, focuses on the bio-centric approach of Islam to nature and the natural environment. Nasr also talks about the restoration of sacredness in nature through a moral obligation of human beings to the natural world. Christian eco-feminist theologian, Sally McFague, criticizes Christian anthropocentric view of nature. J. Ronald Engel, a liberal democratic leader, criticizes the present democratic system for not acting in environmental justice. In their edited book (1992), with the scrutiny of historical evidence, both Rockefeller and Elder recall and recognize that ‘environmental values have historically been shaped by belief systems both within and outside institutionalized religion’ (Branch 1993: 90). Both of them, in their own editorial comments, offer that though religious or theological imperatives are mostly in favor of environmental justice, these may also hamper the environment if they are not interpreted in right and harmonious direction to build up human–nature relationship. This task is, in their view, a great challenge for theologians and religious scholars. The book proposes ‘a new cultural ethos of ecological sustainability and intergenerational responsibility’ (Branch 1993: 90), but Branch doubts its function (Ibid.). Though it is difficult but not impossible to utilize religious cosmologies/theological guidelines for ecological balance and justice if a regular initiative is taken for fruitful interfaith dialog on environmental ethics to increase genuine respect for all components of our natural world. Therefore, Rockefeller and Elder (1992), finally, propose such kind of dialog between/among religions. However, both Rockefeller and Elder (1992) are optimist that religions, with their guidance and

cooperation in other social and political organizations, can work for halting the gradual degradation of the natural environment.

Religions as Promoter for Pro-environmental Stance

Based on a case study on the impact of religious faith on attitudes to environmental issues, Hope and Jones (2014: 57) reveal their findings that religious guidance can act as an instrumental factor to promote pro-environmental ground for reducing consumerism and motivating a balanced relationship between human and nature. Their study shows the necessity of interfaith dialog and the role of religions in forming positive attitudes to nature and the environment (2014: 57). This mixed-method study proves both secular and religious groups as demonstrators of pro-environmental attitudes. In their report, it is seen that Muslim-Christian participants think that they have religious obligations of stewardship to the natural world and from this obligation, they should treat creatures gently; otherwise they would be accountable to God (2014: 57). Thus, the study shows that religious participants refer to nature as the creation of God and so, it is a moral and religious duty to act as guardian for the environment; on the other hand, secular participants consider nature in the process of evolution and they think that it is human responsibility to live with other species in peaceful co-existence (2014: 58). This case study states that there is a need for cooperation between religions and secular institutions for creating a sustainable environment.

But the question comes forward: how is the cooperation between religion and secularism possible while these two ideologies are seen as opposite to one another in most cases? Such question is not answered by Hope and Janes. However, their study is also partially supported by Jenkins and Chapple (2011), and Lai (2011; 2013) in the sense that there should be a cooperation. Jenkins and Chapple (2011) state that without clear understanding of religious dimensions in the integrating process of ecology and society it is not possible to recognize properly the interaction of human and environmental system. So, in their view, humans need first proper knowledge and a clear understanding for making an equilibrium between humans and the environment. Lai, in his works on environmental ethics (2011: 5,17; 2013: 67), argues for diversified and contextual ecological ethics; for him, religions are so diverse and different from others in their own ways so let religious institutions and scholars think and work to develop their own ecological ethics.

Religions as Partners in Ecological Initiatives and Movements

Tucker and Grim (2001: 1–22) survey some recent initiatives between religions and ecological movements. They see religions as shapers of ancient cultures and thereby potential sources of environmental protection (Tucker

and Grim 2005: 26). They view the religious concept of stewardship as a potential ethical foundation and environmental ethics as a common ground for interreligious dialog and initiatives (Ibid). They name Donald Brown and McElroy as important figures who use religious moral teachings to guide human interaction with the natural world (Tucker and Grim 2001: 2). Both Tucker and Grim also appreciate J. Baird Callicott's proposal for incorporating the ethical foundations of different faith traditions into environmental ethics (Ibid.). In their view, religions can clearly contribute to environmental movements.

Our environmental problems are too great to be solved unilaterally. A solution requires a multidisciplinary approach and action plan where religions can play significant roles. This has already been realized by some international environmental groups; for instance, a statement was released by scientists at a global forum held in Moscow in 1990, calling upon religious leaders to work with scientists for the cause of environmental sustainability (Tucker and Grim 2001: 9). In the statement, these scientists declared some forms of human behavior to be 'crimes against creation' (Tucker and Grim 2001: 9). Two years after this conference, in 1992, another statement was issued by the Union of Concerned Scientists, with two-thousand signatures, calling for immediate action to protect the natural environment. In the letter, scientists also asked faith communities to focus on their religious worldviews of nature and to highlight the moral teachings that could generate compassion for the environment. In that same year, in Washington, 150 religious leaders and scientists gathered and issued a joint appeal for environmental protection, declaring:

We are people of faith and of science who, for centuries, often have travelled different roads. In a time of environmental crisis, we find these roads converging. As this meeting symbolizes, our two ancient(s), sometimes antagonistic, traditions now reach out to one another in a common endeavor to preserve the home we share. We humans are endowed with self-awareness, intelligence and compassion. At our best, we cherish and seek to protect all life and the treasures of the natural world. ... We believe that science and religion, working together, have an essential contribution to make toward any significant mitigation and resolution of the world environmental crisis.

(Gottlieb 2004: 653)

While religious environmentalism was slow to take shape, Tucker and Grim (2001: 11–19) show how religious leaders have been increasingly involved in environmental issues since 1972. In that year, religious leaders went to Stockholm to take part in the first environmental conference organized by the UN. In 1975, the World Council of Churches (WCC) convened a conference in Nairobi to discuss environmental issues from faith perspectives. This was followed by other conferences (at MIT in 1979, Vancouver

Assembly in 1983, and Canberra in 1991). Religious leaders joined the UN's Earth Summit in Rio in 1992, calling for their respective religious communities to work together on ecological justice.

Several interfaith meetings were also organized. The first meeting of this kind was convened in Assisi in 1984, followed by another interreligious gathering in Vatican City in 1986. Interfaith meetings are good opportunities for discussing the different moral foundations of world religions with respect to environmental ethics. The UN Environmental Program recognized this and started the Interfaith Partnership for the Environment (IPE). The Parliament of World Religions, held in 1993 and 1999, called for a global environmental ethics. The Global Forum of Spiritual and Parliamentary Leaders held international meetings in Oxford in 1988, Moscow in 1990, Rio in 1992, and Kyoto in 1993, discussing how to minimize ecological problems. Another international organization, the Alliance of Religion and Conservation (ARC), has been working since 1995 to integrate religion and science. More recently, in 2011, the Berkley Center for Religion, Peace, and World Affairs organized an 'Interfaith Dialogue on a Shared Response to the Environmental Crisis,' in cooperation with the United States Embassy to the Holy See and the World Faiths Development Dialogue (Berkley Center for Religion, Peace and World Affairs et al. 2011).

Academic religious programs are also getting more involved with ecological matters. For instance, Mary Evelyn Tucker and John Grim organized a three-year conference series at Harvard Divinity School's Center for the Study of Religions on "Religions of the World and Ecology." They were the editors for the 10 volumes from the series. They also edited an issue of *Daedalus* on 'Religion and Ecology: Can the Climate Change?' The Forum on Religion and Ecology was founded in 1998 and has been based at the Yale School of the Environment since 1998. It fosters religious concern about ecological issues through research, publications, seminars, and workshops. It has a comprehensive website on this topic (Yale Forum on Religion and Ecology). In response to the Copenhagen Climate Summit, the Global Parliament of World Religions convened a meeting in 2009 in Melbourne to write a Climate Change Resolution which declared:

As people of faith, we believe we have a responsibility to the source of life and to future generations to care for this planet – our home. We therefore call on the governments of the world when they meet at the UNFCCC at Copenhagen to take urgent and meaningful action to stem climate change.

(Parliament of the World's Religions 2009,
cited in Mohamed 2012: 41)

Faith and faith-based communities are also involving themselves in the environmental cause. Among major religious leaders and scholars, the Dalai Lama, Rabbi Ishmar, Archbishop Bartholomew, Seyyed Hossein Nasr,

John B. Cobb, the late Pope John Paul II, and Pope Francis have all been major contributors to the discourse, urging world leaders to take the necessary steps for reducing our ecological problems. Their voices are also echoed by former UN Secretary-General Kofi Annan, who called for a new ethics of planetary stewardship, and his successor Ban Ki Moon's agenda for "The Road to Dignity by 2030."

The UN set an agenda of Sustainable Development Goals (SDGs) in 2015, to be achieved by 2030 – an ambitious but also admirable task. But without firm cooperation from all member states, these goals will be unmet. Faith institutions, religious leaders, faith-based non-governmental organizations, and faith communities were also asked to play an active role using their strengths, particularly their moral guidelines and ethical teachings, to reform human attitudes and behavior. And through other UN programs faith leaders have dialogued with one another as well as non-religious environmental activists, representatives of non-governmental organizations, and policymakers.

A multi-cultural dialog on environmental issues, held on 23–24 April 2016, was organized by the UN Environmental Program (UNEP) in collaboration with the UN Educational, Scientific and Cultural Organization (UNESCO) and the Department of Environment (DoE) of the Islamic Republic of Iran. Here scholars and practitioners of diverse faith and cultural traditions sought "lasting solutions" to the present environmental crisis (UNEP 2016: 2). From their respective faith and cultural traditions, they discussed some important themes – "Mother Earth" (coined by Bolivia), "ecological civilization" (proposed by the Chinese government), and "Happiness Index" (used by Bhutan) – as alternative approaches to sustainable development and ecological protection (Ibid.). Representing different faiths and cultures, they unanimously supported environmental ethics, and furthermore, they also supported the notion that traditional moral, religious, and spiritual concepts could strengthen environmental ethics. They reiterated that the natural world should not be treated as an instrument, but as something with its own intrinsic value. In their view, non-human animals are morally significant, have a right to life, are inseparably connected with the cosmic order and with God, and their mistreatment means violating the natural law and ignoring God's connection to His creation. Human life is dependent on the natural world, thus humans should be more responsible in using natural resources and express a gratitude for nature in their religious practices. They argue further that human wellbeing is deeply related to the wellbeing of non-human animals, so the suffering of non-human creatures adds to human suffering. They argue that sustainability should be given priority over greed and consumerism, and humans should live in harmony with nature (UNEP 2016: 7). With all these ethical guidelines, religious and spiritual leaders have brought the concept of "duty of care" into the discourse (UNEP 2016: 9).

At a September 2015 multi-faith meeting in Bristol, UK, organized by the UN, spiritual and religious leaders called upon world governments to take

practical steps for environmental protection (UNEP 2016: 28). More succinctly, they urged them to save wildlife and forest areas, plant more trees, produce and use green technologies, reduce dependence on fossil fuels, and invest more money in renewable energy sources and promote their use.

Multi-faith leaders and scholars are already collaborating to mitigate our ecological crisis. In so doing, religious and spiritual traditions are mutually illuminated, and religious communities are brought into friendly partnership despite their theological and cultural differences. More significantly, such activities allow and inspire faith leaders and practitioners to share their respective religious and spiritual ecological wisdom with their counterparts in other religious and cultural traditions. Clearly, religious and spiritual traditions are an essential part of the ecological solution, and secular or non-religious persons and communities should not deny them a role in the hard work.

Interfaith dialog on environmental problems leads to multi-faith cooperation. Such dialog is not limited to faith communities, as these can also reach out to secular activists, policymakers, public agencies, non-governmental organizations, scientists, businessmen, journalists, transnational organizations, international bodies, and the like. Such combined efforts by people from all walks of life are a cause for optimism. Faith traditions in collaborative, practical dialog have achieved remarkable successes. And since more people are religious than not (at least globally), leaders of religious and faith traditions have a greater megaphone to the general populace. Though difficult, humans can be convinced to reform their attitudes and rectify their behaviors in favor of environmental sustainability.

Origin and Development of Eco-theological Movements

Najma Mohamed describes three phases of eco-theological movement as the late 1970s, 1980s, and the mid-1990s onward. In her view, the origin of this movement lies in the debates and disputes of Lynn White's critical analysis of religious role in ecological crisis. After the publication of White's groundbreaking thesis (1967), mainstream environmental philosophers, scholars, ethicists, activists, and so on started to think of religions as enemies of environmental movements (Mohamed 2012: 38). In mainstream ecological movements, the creation story of the Bible was considered as opposed to natural process of creation and religious concept of stewardship was put in contrast to partnership of humans with other creatures (Mohamed 2012: 39). Some scholars who had sympathy for religions suggested to reform religions, especially Judeo-Christian traditions, in favor of environmental protection. Such things reacted religious communities and they took some initiatives to reinterpret some traditional ideas in the light of timely needed ecological sustainability. Some scholars like Cobb and Nasr wrote some books connecting their faith perspectives with the present environmental issues. So, in the first phase, eco-theological movements took

their formation shapes as a way of defining them and making counter-arguments to allegations raised by the mainstream ecological movements against religions.

In the second phase, as Mohamed notes, there was a communication between/among religions about environmental sustainability (2012: 39). In one way, religious communities were defending themselves in their own ways, and in the other, they started to build up a relationship with other religious communities for the greater cause of environmental protection. For this purpose, religious communities of five major world religions met in Assisi, in 1986, and they declared religious views of natural world from their respective faith traditions. Thus, the historical Assisi meeting of interfaith dialog on environmental issues provided a suitable platform for religious communities to familiarize eco-theological movements all over the world. Later on, mainstream environmental movements can understand that world religions can play a significant role in sustaining the environment, and such realization lowered their agitating voices against religions. Even scientific communities, as I have discussed before, requested religious communities to grow a moral awareness in human mind for ecological equilibrium. So, in this second phase, eco-theological movements come in interfaith initiatives by popularizing their works in a wider world beyond their borders.

In the third phase, Mohamed shows how eco-theological movements are well accepted and appreciated by other religious and non-religious organizations (Ibid.). Parliament of World Religions organized some international conferences, meetings, and workshops on environmental issues. Some academic scholars in religions, scholars from different faith traditions, and religious leaders of religious institutions published their concerns on the ecological crisis and offered their cooperation to work with mainstream environmental movements. This brought religious environmental movements and non-religious environmental movements in a platform for a mutual understanding of the issues and collaboration between them. Even an alliance was formed “between eco-theologians and critical ecologists” for working together to reduce the ecological crisis to a tolerable level (Ibid). For growing academic specialization on religion and ecology, an academic initiative like the Forum of Religion and Ecology (FORE) was established at Harvard University. International organizations like United Nations, Conservation International, and World Bank also cooperated to implement some research projects on religion and ecology to capitalize “religious teachings and institutions to spread ecological awareness” all over the world (Mohamed 2012: 41).

Thus, in these three phases of eco-theological movements, we see religions from theorizing ecological issues from a religious perspective through popularizing religious role in environmental sustainability to activism. It does not matter whether religions are scientifically credible or not, but it is proved that their influential role in diverting human perception and

behavior is undeniable. So, religious moral teachings regarding the environment played a strong role in forming eco-theological ethics and eco-theological movements, which are becoming part of current environmental movements.

A Reciprocal Relationship between Religions and Environmental Movements

In her dissertation (2012: 35–48), Najma Mohamed relates religions with some environmental movements. Referring to Baker and Morrison, she classifies the ongoing environmental movements into two broad categories such as (1) spiritually motivated environmentalism and (2) environmentally motivated spirituality. She considers the first one as eco-theological movements and the second one as eco-religious or eco-spiritual movements (Mohamed 2012: 36). The former deals with those environmental movements in which religious moral teachings work as guiding sources to motivate humans for environmental sustainability while the latter emphasizes a deep-rooted relationship of humans with the natural world without referring to religions. Eco-theologians and religious environmental ethicists are critics of eco-spiritual movements for divinizing the natural world and ignoring human dignity. On the other hand, theorists, ethicists, and activists of eco-spiritual movements are critical of eco-theological movements for supporting hierarchical values and human supremacy over other non-human animals.

Despite such explicit demarcations between eco-theological movements and eco-spiritual movements, there are “significant areas of communality” between these two movements (Mohamed 2012: 38), because both movements focus on spiritual feelings for nature. Eco-spiritual movements view “the natural world as an integrated whole” where humans are only a tiny part like other substances of the environment (Ibid.). In eco-spirituality, humans are suggested to have a deep feeling that they are not isolated from others but deeply connected with every part of natural world. Similarly, though in a subtle distinctive way, eco-theological movements advise humans to feel deeply the natural world as signs of God through which God’s power and wisdom are manifested. Like eco-spiritual movements, eco-theological movements view humans as a micro part of the macro-cosmic world. This idea of eco-theology implies a reciprocal relationship between eco-spirituality and eco-theology. Because of this inter-relationship between these two different schools of thoughts and movements, religious environmental activism seems a significant factor in the global environmental discussions (Mohamed 2012: 35).

Eco-religious Resources for Environmental Ethics

Religions can offer many resources for ecological equilibrium. In her dissertation (2012: 43–48), Najma Mohamed argues that there are some

outstanding eco-religious principles that can help protect the environment. She rightly notes that eco-religious understanding provides a metaphysical foundation for moral conduct toward creation. In contrast, general environmental ethics lacks this solid metaphysical foundation, depending merely on the scientific understanding of nature. Since modern science ignores metaphysics, modern humans – who are mostly secular-minded in the sense that they give priority to science over religion – do not recognize metaphysics as a constituting source of knowledge. By discarding the metaphysical basis from epistemology, environmental ethics – as eco-religious scholars like Cobb and Nasr argue – cannot grow an inner awareness and deeper feeling in the human mind regarding non-human creatures. In Özdemir's view, a metaphysical foundation is necessary for environmental ethics to be workable (2008: 6). The way religious spirituality can motivate humans for simplicity, compassion, and care cannot be replicated. Even former UN Secretary-General Ban Ki-moon confessed this as he addressed faith communities:

You are the leaders who can have the longest reach, the wildest, and the deepest reach. ... Your potential impact is enormous ... Your actions can encourage political leaders to act more boldly in protecting our planet earth.

(Ki-moon 2009, cited in Mohamed 2012: 44)

Religions can present an alternative worldview to the secular, scientific understanding of nature and technology. Put differently, today's dominant worldview is a materialistic and mechanistic one, appreciating only the power of matter, not the power of the spirit/s *behind* the matter. Humans have two basic parts: (1) the materialistic body; and (2) the spiritual mind. Our current worldview focuses on the former and ignores the latter. It is a one-sided and partial understanding of human needs. In contrast, a religious worldview covers both sides by providing moral guidelines for our material needs and spiritual connections.

Unfortunately, humans continue to emphasize materialism at the expense of our spiritual nature and capacity. Such a worldview cannot provide a satisfactory explanation for the real value of creation – and thereby the ultimate goal and purpose of life – so a deeper relationship between humans and the natural world is not possible. On the other hand, religions can offer the metaphysical vision needed to divert humanity toward an ecologically friendly worldview.

Mohamed sees religions as the perennial source of moral conduct, arguing that faith traditions compel humans to be humble, simple, frugal, and kind, and not egotistical, hateful, and consumption-oriented (2012: 45). She asserts that religion pushes us to be egalitarian, self-restrained, and to be service providers rather than service-takers. In her view, religions help grow a deeply rooted awareness in the human mind about “values of justice, compassion

and mercy towards all life” (Mohamed 2012: 45). She argues that leading a lifestyle in accordance with religious moral teachings is an ethical life that does not harm other creatures. For her, religions not only teach reverence for non-human animals but also ask humans to be humble and responsible consumers of plants and abiotic elements. Religious moral guidelines on the environment are not limited to theoretical discussions. These teachings promote real, ethical actions that protect the life around us.

Mohamed shows that religious rituals, establishments, and scriptures can work as an institutional framework for environmental ethical activism. She argues that all these resources remind humans that they are deeply related to all other biotic and abiotic elements of nature, that all life is purposeful and meaningful, that every substance of nature is intrinsically valuable, that they should have a sense of responsibility, and that they are accountable before God. These contributing and constituting sources of religion keep humanity connected with their surrounding environment.

Mohamed indicates “the physical, financial and social capital” of religious wealth (2012: 47). In her view, houses of worship – mosques, churches, synagogues, temples, etc. – work as “a vibrant social network” of practitioners (Mohamed 2012: 47). Such places awaken people to the necessity of environmental sustainability. Similarly, these holy places may also be used as training centers to educate people on environmental ethics.

World religions have “a large number of followers,” more than two-thirds of the global population (Ibid.). If this vast number of humans is better-informed and morally shaped by their religious traditions in ecological matters, it will greatly improve the chances of environmental sustainability. It would thus be wrong to ignore the influential role of religious communities in environmental matters.

Environmental Problems as a Spiritual Crisis of Modern Humans

Religious scholars like Cobb and Nasr consider the environment to be the greatest spiritual concern of human beings. For them, due to mechanistic and materialistic worldviews, modern humans have lost their spiritual power to feel part of the natural world. Humans are obsessed with so-called economic affluence, which is achieved through environmental destruction. By giving priority to economic development, modern states and social systems ignore real sustainability. Similarly, the international trade, commerce and financial systems of the modern world are based on modern economic theories and supported by corporations, organizations, and policymakers without any holistic regard for the world as a living organism.

Humans treat the environment as a commodity, not a community, considering themselves the owners, not guests, of the Earth. This worldview, along with modern economic and financial systems, has made humans greedy, overambitious, and selfish, with modern science and technology fueling their limitless expectations. As a result, humans are totally captured by “greed,

envy, ambition, selfishness, apathy” – all “moral and spiritual issues” (NC Interfaith Power & Light, 2017). Human immortality cannot be mitigated by modern science (in fact it often exacerbates it!). Faith and spiritual traditions are thus urgently needed. Here a statement of Bartholomew, Ecumenical Patriarch of Constantinople, seems appropriate:

We believe that the roots of the environmental crisis are not primarily economic or political, nor technological, but profoundly and essentially religious, spiritual and moral. This is because it is a crisis about and within the human heart. The ecological crisis reflects an anthropological impasse, the spiritual crisis of contemporary (hu)man and contradictions of his rationalism, the titanism of his self-deification, the arrogance of his science and technology, the greed of his possessiveness (“the priority of having”), his individual and social eudaemonism.
(Bartholomew, Ecumenical Patriarch of Constantinople, 2015)

As the root causes of ecological crises are related to the spiritual bankruptcy of modern humanity, the remedy lies in “a total change of mentality.” Bartholomew argues: “The solution of the ecological problem is not only a matter of science, technology and politics but also, and perhaps primarily, a matter of radical change of mind...(Ibid.).” For him, scientific knowledge cannot reach the depth of the human heart, it cannot reveal the truth of appearances (Ibid.), and it certainly cannot prevent our destructive behaviors. Rather, it creates a demarcation between knowledge and action. That is why, despite being so “knowledgeable,” modern humanity cannot be bothered to do what it knows to be right, and more ironically, does not repent for its wrongs (Ibid.).

Therefore, Bartholomew proposes *metanoia* – a significant shift from matter to mind – as a viable way toward environmental sustainability (Ibid.). In no way can we deny that the ecological crisis has no spiritual dimension – some scientists have already made this confession. Gus Speth, of the Yale School of Forestry and Environmental Studies, has worked for a long time on this topic and recognizes this fact. As he said on British radio:

I used to think that the top global environmental problems were biodiversity loss, ecosystem collapse, and climate change. I thought that with 30 years of good science we could address these problems, but I was wrong. The top environmental problems are selfishness, greed, and apathy, and to deal with these we need a spiritual and cultural transformation. And we scientists don’t know how to do that. (Cited from NC Interfaith Power & Light, 2017; United Nations Environmental Program 2016: 9)

As Wilson contends in his (2006) *The Creation: An Appeal to Save Life on Earth*, religion and science are the two most powerful forces on Earth, but

their ways are different. Science deals with what appears (material reality) using analytical tools, whereas religions deal with the unseen, probing our world and our souls using spiritual awareness. We need *both*. Being an optimist, Wilson says, “If religion and science could be united on the common ground of biological conservation, the (environmental) problem would soon be solved” (2006, cited from NC Interfaith Power & Light, 2017). Similarly, Einstein supported a bridge between spiritual understanding and scientific knowledge (United Nations Environmental Program, 2016: 8). To use a metaphor, science is the body, and religion is the mind. The body is a matter of physicality and appearance, but the mind is characterized by the invisible – what we think and feel. We do not argue that one is more important than the other; rather both are interconnected and essential for human existence.

Similarly, if we compare the natural world to a human being, we can see science as being concerned with outward, material reality and religion with inner reality, that is, the metaphysical forces and sinews that move and bind creation together. While science and technology see the universe as substance, religions see it as spirit. Science and technology show us how to use creation for our own benefit, but religious and spiritual traditions guide us in how we should treat creation with gentleness and compassion. As modern humans do not enough conduct themselves based on moral and spiritual attributes like frugality, simplicity, partnership, philanthropy, fraternity, oneness of creation, responsibility to creatures, accountability to God, etc., we contend that our current environmental crisis is a spiritual one. Ban Ki-moon says that “an urgent moral imperative” is needed to protect the natural environment (United Nations Environmental Program, 2016: vi). Furthermore, Ki-moon considers the protection of the environment to be “a sacred duty for all people of faith and people of conscience” (Ibid.).

Environmental Ethics and Religious Moral Guidelines to the Environment

Having realized the environmental problems, some academic scholars, mostly from secular backgrounds, are working on environmental ethical issues. From such scholarly study environmental philosophy has emerged first (Brennan & Lo 2010), and then, environmental ethics comes out from such philosophical discussion in regard to the environment (Benson 2000; Vromans 2012; Curry 2011). Environmental ethics deals human relations with the environment without reference to religions. It discusses ethical matters in environmental issues from the deep ontological foundations. As the modern world order is secular, now everywhere there is a victory of a secular way of understanding. It is also equally true in the study of human behavior in terms of environmental issues. In the present world, environmental ethics is mostly understood as secular environmental ethics. Modern

humans, in general, are secular; so, for them, secular approaches in environmental ethics seem better than religious approaches in it. Almost environmental ethicists belong to secular environmental ethics. They are critical of religious approaches to the environment arguing that religions support human domination on the natural world.

Religious environmental ethics refers to the moral obligations of humans that are prescribed by religions towards the environment. World religious traditions are morally concerned for the creatures; so, religions emphasize the moral obligations of humans to non-human entities in the environment albeit these moral obligations, i.e., ethical guidelines to non-human organisms in the environment are seen as somewhat less significant compared with their responsibilities to other humans. Religions repeatedly remind humans of the responsibility to take care of other creatures and condemn greed which is the prime cause of human destructive activities in the environment. Concurrently, religions encourage humans to be self-restraint and respectful to other creatures, which are crucial for environmental sustainability. Unfortunately, such religious ethical feelings and guidelines are hardly seen in secular environmental ethics. However, only since the 1970s, mainly after White's thesis on criticizing religious role on environmental crisis, religious scholars have started to think about religious moral obligations to the natural world in the form of religious environmental ethics. Now religious scholars, for instance, Cobb and Nasr, are rereading the religious scriptures to reinterpret religions for environmental ethics. Pope John Paul II wrote, "The Ecological Crisis: A Common Responsibility" in 1990 where he argues that nature has intrinsic value as the creation of God. On the recognition of St. Francis's thought and contribution to the environment, Pope John Paul II declared him the Patron Saint of Ecology in 1979 and Pope urged Christians to work for environmental sustainability with all other environmental activists. Under the initiative of the present Pope Francis, a document *Laudato Si*, Encyclical on Environment, has published in 2015. In the document it is stated, that to do anything subject to environmental degradation is termed as a moral sin. This 192 pages document states safeguarding the environment as a moral imperative for human beings, and so it proposes immediate global action on environmental degradation and climate change. Pope Francis repeatedly assails the consumerism and wastefulness of modern life as a vital cause of environmental degradation. He urges all powerful nations and states for transforming the present economic system and political policies to avert environmental catastrophe.

Though environmental ethics is developed by secular academicians, its roots cannot be separated from religious moral teachings. As noted before, religious environmental ethics takes the sources from religions for the ethical understanding of the environment while secular environmental ethics is based on secular thought. There are some inconsistencies but it will be unwise to quarrel on those differing points. As the present world is now

at the door of environmental catastrophe, modern humans should think about how religions can strongly contribute to the existing environmental ethics (Misra 1995; King, 2001; Foltz et al. 2003; Hessel 2000). On this crucial point, I personally believe that religious environmental ethicists and secular environmental ethicists can work to grow human awareness and responsibility to the environment. Despite their differences in regard to approaches, both groups of ethicists can share the common purpose for halting environmental degradation. For the common objective of saving the environment, modern humans should realize the capacity, power, and driving force of world religious traditions in motivating the present destructive human behavior toward the environment. In order to reduce the existing gap between environmental ethicists and eco-theological scholars, there should be some regular dialogs between them, which will help both groups of people to become closer than earlier for working hand in hand. Environmental degradation has diverse causes; so, it is not possible to solve the problem only by removing a single cause. This problem is created globally and locally. That is why it needs diverse approaches in consideration of local and global contexts. In this context, it is suggested to “(T)hink globally and act locally” (Kearns 2004). However, dialog is crucial for sincere cooperation among different groups of people, schools of thought, ideologies, civil society members, non-government organizations, government officials, and general people in order to restore the natural environment as it should be.

All these events reveal that religions may work significantly if they are associated with mainstream organizations. But the problem lies in the attitude of modern humans who are mostly secular-minded, and they do not want to understand religions from inside. Concurrently, their misunderstandings of religions seem obstacle to the deep-rooted alliance between religious and secular organizations. Similarly, faith communities need to be more liberal-minded to work with people who are not like them. In this way, if there is a compromise between both groups there will be possible to continue such kind of alliance in the future for the cause of ecological interest.

Conclusion

Environmental degradation is associated with human power, greed, supremacy over other animals, and the increasing human population. Since the beginning of civilization, human beings have put pressure on the environment, but after the Industrial Revolution environmental degradation became so great that nature could no longer heal itself. Science and technology gave humans more power to exploit the planet, and radical humanism and other secular ideologies transformed humans from spiritual beings into self-worshipping ones. Economic development and short-term benefits took precedence over sustainability and posterity.

Obsessed with economic progress, modern humans indiscriminately chop down trees, strip down mountainsides, block rivers, spread fertilizers and pesticides, plant genetically modified crops and foods, choke the air, contaminate waters, degrade soil quality, acidify the oceans, and bulldoze habitats. All these activities cause pollution, ecosystem disruption, human and animal disease, and – most catastrophically – climate change. If such activities are not reduced, we face ecological and climatological devastation and even the total collapse of the Earth's entire ecosystem. Considering such doom, humans must modify their behavior. This requires the co-operation and collaboration of all.

Our environmental situation is so dire that there is no time for disputing religious concepts like human supremacy, but rather we must consider how religious moral teachings and communities of faith can work together. It is true that religion has no external forces at hand that can directly enforce its moral teachings, but they can influence the human mind and soul. Sources of moral goodness, faith communities can foster awareness about the essentiality of environmental sustainability. Religious communities can also try to reduce the distance between them by adapting inter-, intra-, and multi-religious approaches. Considering the power of religious and spiritual traditions, religious leaders and communities should be included in more national and international efforts to resolve our ecological crisis.

Notes

- 1 According to *the World Risk Report 2012* (United Nations University, 2012), environmental degradation increases rapidly disaster risk worldwide. The report reveals that environmental degradation significantly reduces the ability of the earth for coping with disaster risks. The balance sheet of the report, based on the analysis of ten years from 2002 to 2011, shows alarming situation. In the reported time it is evident that already 4,130 disasters happened on the surface of the earth where more than one million people died with the economic losses of at least 1.1195 trillion US dollars.
- 2 For details of how environmental problems are being created, see Sayem, Md. Abu (2021a), Causes and Consequences of Environmental Degradation: A Survey Study, *International Journal of the Asian Philosophical Association*, 13(2), 45–67.
- 3 If we make a list of the causes for the ecological crisis, we can include dualistic worldview, dominion worldview, mechanistic worldview, materialistic worldview, cultural domination of humans over nature, religious/theological views of human supremacy, utilitarianism, radical anthropocentrism, renaissance humanism, industrial revolution, scientific worldview, modernity, human progresses, spiritual bankruptcy, economic affluent, curiosity for exploration to natural world, human luxurious lifestyle, dependence on technology, etc. After analyzing the identified factors of the environmental crisis, Najma Mohamed has categorized the contributing causes into three main groups: (1) anthropocentric worldview; (2) the modern techno-scientific paradigm; and (3) market based economic ideology (2012: 2). If I am asked to talk about the most direct factor of the present unprecedented ecological crisis, I must state the utilization of fossil-based energy sources, as our surrounding environment is being directly affected by combusting fossil fuels.

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3 John B. Cobb's Christian Eco-Theological Views and Environmental Issues

Introduction

John B. Cobb, Jr., integrates process theology with eco-theology. Cobb attempts to grasp our present ecological problems at their core through his Christian ecological vision, proposing an eco-theological model for saving the planet. In his works (1972, 1982 with Birch, 1992, 1994, 1994 with Daly), he discusses the ecological crisis in connection with social, political, and economic issues. This chapter discusses Cobb's Christian eco-theological understanding and his recommendations for environmental sustainability.

Why Cobb is Interested in Environmental Issues

Cobb has been thinking about environmental issues since 1969 (Cobb 1992: 1; 1994: vii). Paul Ehrlich's *The Population Bomb* (1968) and Lynn White's (1967) essay "The Historical Roots of the Environmental Crisis" were two works that made him particularly concerned about environmental degradation. White's thesis presents the Christian faith as responsible for an anthropocentric view of nature. Like many other Christian theologians, it was difficult for Cobb to accept White's argument. He did acknowledge that Judeo-Christian human-centeredness had contributed to the problem but qualified that earlier Christian theologians had mistakenly interpreted the biblical descriptions of human domination (1971: 32; 1992: 93).

Cobb's Quest for the Reasons of Environmental Degradation

Responding to White's thesis, Cobb states that "Christianity was certainly not *the* cause of the environmental crisis" (Cobb 1992: 2). In his view, our ecological problems are mainly caused by modern science and technology (Cobb 1972: 33). Partially, at least, Cobb supports White's argument that as a dominant faith tradition in the West, Christianity encouraged a human-centric attitude that exploited the environment (1971: 32; 1972: 33–35; 1992: 2). He has criticized the role of the Church and Christian theologians in supporting so-called human domination over the natural

world. However, Cobb has searched deeper for the genesis of today's environmental problems. Environmental degradation, as he sees it, started even before the advent of humanity. Natural events like meteors, volcanic eruptions, blizzards, floods, earthquakes, wildfires, etc., are all major causes of environmental degradation that occurred before human existence. Early human civilization lightly degraded the environment through hunting, fishing, and gathering. Greater, more systematic degradation began with the rise of agriculture and domestication, and as civilizations arose, houses, roads, and vehicles began to mar the environment. The watershed moment was the Enlightenment and the Industrial Revolution, which saw the rapid advance of science and technology accompanied by a philosophy of human mastery over the world. (Cobb 1994: 1–3) Since then, the environment has been degraded through a “mechanistic assumption about nature, human greed, concern for economic survival, chronic lack of foresight, social arrogance, and so on” (Soneson 1994: 155).

Through this brief reading of Cobb, we see that there are two ways the planetary environment may be hurt: through natural causes and human-made causes. It is certainly difficult for humans to control or mitigate natural disasters, but as a self-sustaining geological, meteorological, and ecological system, the Earth is usually able to repair itself. But human-caused environmental degradation overtaxes the planet, going beyond what is environmentally sustainable. Cobb argues that our present environmental crisis is due to human selfishness, and it is our urgent responsibility to correct it.

Cobb's Process Theology in Eco-Theological Understanding

While always interested in connecting theology to public issues, Cobb's comfort with a classical understanding of God ended when he arrived at the University of Chicago, where Charles Hartshorne (1897–2000) introduced him to the process philosophy¹ of Alfred North Whitehead (1861–1947). It was through process theology that Cobb discovered a new understanding of the God–human–nature relationship, and here we will discuss several key aspects of it.

According to Cobb's process theological thought, “God is the creative source of all things” (Cobb 1980a: 450). God's becoming is the focus rather than God's being, which means is God understood as organic rather than as static (Cobb 1980b: 350). Whitehead's process philosophy allows Cobb to give more importance to God's immanence rather than to God's transcendence, establishing a deeper and more intimate relationship between God, humans, and nature (Cobb 2014: 43). For Cobb, process philosophy supports the concept of panentheism² – all is in God, and God is affected when any part of nature is affected. God feels pleasure when any part of nature feels pleasure, and God suffers when any part of nature suffers. This increases and enriches God's experience at every moment (1980a: 458). Such a realization of the God-Nature relationship establishes that nature's

pleasure or suffering affects God directly and vice-versa because Creator and created are interrelated, interdependent, and interactional. This also implies that the created is dependent on the Creator and, in a way, the Creator is also dependent on the created (for growth and enrichment). According to Cobb's understanding of the Ultimate,³ God is co-eternal with the world and shares in the life of creation. Every creature experiences God at every moment as their ground of existence. The human experience of God is inherently interwoven with their experience of the world. God is the ground of the world's becoming and acts in the world by self-revelation.

Unlike traditional theologians, Cobb articulates his understanding of creation and nature through his process metaphysical view of God. He sees the universe from its totality, not from its fragmentation. For him, every part of creation is deeply connected to God and contributes, in its own way, to the divine process, and thus also to the beauty of nature. Every creature adds increasing richness to God's experience, and thus also to God's life. As God wants to enrich Himself and the universe, He shares in every creature's experience by revealing Himself to it (Cobb 1980b: 362).

For Cobb, God's love is the foundation of all realities, through which all things live and move, and God's power in the world is necessarily persuasive, not coercive. Cobb considers Jesus' life a revealed character of God's love on Earth. This shows a deeper connection of Christ with creation: From a process metaphysical point of view, Cobb sees Jesus as a *cosmic* Christ rather than a mere incarnation of God in a historical person. Jesus Christ, as Cobb (2016) argues, is also affected alongside his *Abba*, God, by the pleasure and suffering of creation.

Cobb criticizes traditional theological understandings for considering the God-Human relationship and human salvation to be the sole focus of Christianity, excluding the idea of salvation of non-human animals. For him, such a traditional theological understanding considers humans superior and all other non-human animals as subservient to human needs, a negligent view that ultimately leads humans to ignore or harm animals and brutally exploit natural resources (Cobb 1992: 93).

Cobb is influenced by the process philosophy of Whitehead, who saw metaphysical reality as continuous changes and growth. According to this philosophical understanding, everything follows a creative process. As Whitehead sees it, in the past, the human understanding of science, ethics, and religion was influenced by the worldview of a particular community, but in modern times everything is influenced by Western science. In Whitehead's view, such does not represent a holistic approach to human thought, so through a process philosophical view, he articulated religion, ethics, cultural norms, traditional values, etc., in a new scientific and philosophical understanding of the world. In Whitehead's view, the natural world has its own intrinsic value (Cobb 1972: 112). Every component of the environment (all the way down to basic matter) is real, each interacting with and affecting every other component in its own way. For Whitehead,

all biotic and abiotic organisms in the natural environment are interrelated and interconnected (Ibid.). He criticizes those who deny this reality. In his view, there are two evils: the first is to ignore the true relationship of all organisms with the environment, and the other is to deny their intrinsic value (Ibid). Whitehead sees the entire universe as a vast ecological system (Cobb 1972: 113). Cobb recognizes Whitehead's contribution to his own thought when he states:

Whitehead has taught me to reject dualism, anthropocentrism, substantialism, and essentialism. Whitehead's influence also appears in my understanding of the relation of God and the world. He has taught me to understand that God is in the world and the world is in God. God's grace is God's own presence in the world, and God is genuinely emphatic with the world, rejoicing with those who rejoice and suffering with those who suffer. I find this message in Jesus, and it deeply informs my understanding of Christian faith and its ethical expression.

(Cobb 1991: 12–13)

Whitehead's philosophical thought helps Cobb to understand ecology in a deeper way. As a natural system, ecology refers to the relationship and interconnectedness of biotic organisms with the environment. In the natural world, everything is interrelated and interacts with everything else. At the same time, there is competition for growth and existence. Interdependence and competition are necessary for the ecological system. For Cobb, as a part of nature, humans are bound to respect this natural process. He argues that as human beings are included in this system, violating this system means betraying themselves. Cobb attempts to prove this by arguing that the biblical description of creation never considers the natural system valueless. He criticizes those who ignore the value of ecology. After rejecting the traditional Christian views of radical anthropocentrism, Cobb also evaluates the rights and values of ecology from a theological perspective.

Cobb's Criticism of Mainstream Approaches to Environmental Ethics

In the on-going discourses of environmental ethics, there are three dominant approaches: anthropocentric, bio-centric, and eco-centric. There are also two influential views – eco-feminism and environmental pragmatism – that offer different perspectives on these three approaches. Cobb first criticizes the anthropocentric view (Cobb 1992: 85; 92), which holds that God told human beings to subdue the natural world.⁴ According to traditional interpretations of the biblical creation story (Gen. 1: 27–28), human beings are told to dominate the Earth – a sign of their superiority. Other beings have only instrumental, not intrinsic, value; if they have value, it is only insofar as they benefit human beings.⁵ For Cobb, this approach to Christian

faith gave human beings license to exploit their natural world. Cobb instead argues that the verses regarding human domination have been misinterpreted by Christian theologians (Cobb 1972: 117; 1991: 27; 1992: 92–93; 1994: 18–19; Daly and Cobb 1994: 393).

From the same biblical sources, Cobb shows that it is our human responsibility to take care of God's creatures, which have intrinsic value.⁶ It is true that humans are created in the image of God (Gen. 1: 27) which is a sign of human supremacy over other creatures, and the Bible explicitly tells humans to rule over others⁷ (Gen. 1: 28), but that same creation story⁸ describes Adam as a worker and caretaker of Eden (Gen. 2: 15). In this way, humanity is placed in the garden, i.e., in the world along with all other beings (Bouma-Prediger and Bakken 2000: 204). Humanity is granted special status to take care of the world, not to exploit it. Cobb further argues that even before the creation of humans, God had already created other creatures who were undoubtedly "good" in God's eyes (Cobb 1994: 18), and similarly, after the arrival of humans, the whole of creation is reaffirmed as good (Cobb 1991: 27). This indicates that other creatures have an intrinsic value independent of human beings (Cobb 1994: 18). As they are created by God, they have their own value that is derived from their creator (1972: 117).

All creatures are valuable in the sight of God, so all creatures have value in themselves (Ibid.). According to this argument, humanity shares in creaturehood, neither alien to other beings nor the other way around. Jesus Christ's concern about the sparrows (Cobb 1994: 18) implies the intrinsic value of the other animals. "Behold the lilies of the field" (Matthew 6: 28) indicates the intrinsic value of plants. Paul's redemption theory also includes the totality of creation (Bouma-Prediger and Bakken 2000: 177). In the ark of Noah (Cobb 1991: 23–24), animals are preserved and protected at God's command, and after the flood, God's covenant with Noah included the natural world (Cobb 1994: 18).

In the scriptural descriptions, humanity has a special status, but this does not mean that humans are separate from the natural world. Nothing in the creation story suggests that only humans have value. But unfortunately a kind of dualism – humanity and nature – came to be supported by later Christian scholars and theologians (Cobb 1991: 20–21; 92: 95; Santmire 1985; Bouma-Prediger and Bakken 2000: 33) that is not endorsed in any way by the Bible. Cobb categorically notes, "if there is a dualism there, it is between creature and creator" (1992: 93). He keeps saying, "the Bible does not support strict anthropocentrism in terms of the relation of human beings to other creatures" (Ibid.). For Cobb, "the Bible calls with great consistency for theocentrism" (Ibid.). But this biblical theocentric view was later replaced by a human-centric view, as Cobb says:

Even its focus on human beings is derivative from its way of understanding God. It is because God made us in God's image, because God

cares for us, because God sent Jesus to suffer for us, that we are to appreciate our own worth and care for one another. When we shift from this theocentric vision to an anthropocentric one that takes human value and importance as its starting point, we have abandoned the biblical perspective.

(Cobb 1992: 93)

Neither is the biblical theocentric view maintained. Over the centuries, theocentrism has been misunderstood and distorted in many ways (Cobb 1992: 93). First, people assumed the anthropocentric view, and then second, God was separated from non-human creatures, permitting humans to treat nature as an “outsider.” But according to the true theocentric approach, people should consider serving nature the same as serving God. To not love and serve God’s creatures is to not love and serve God. So pleasing God means taking care of God’s whole creation. Thus, the theocentric approach does promote “participatory inclusion,” as Cobb states:

All that happens in the world happens also in the divine life. All that we do to creatures, we do also to God. However, we distinguish our species from the others, whatever special status we attribute to ourselves, if we accept the biblical theocentric perspective, we cannot deny the value of the sparrow as well, both in itself and for God.

(Cobb 1992: 93)

What is explicated from Cobb’s interpretation is that the Bible never supports anthropocentrism where everything is seen as valuable only insofar as its relationship to human beings. Rather, the Bible takes the view that all creatures are seen in a relationship with God, and that every creation has its specific purpose designed by its creator, and everything works to fulfill that purpose. Nothing is valueless in the eyes of God. All abiotic and biotic organisms have their own intrinsic value without consideration of their instrumental use by humans. By rejecting the traditional (but unbiblical) anthropocentric approach, Cobb concentrates on a bio-centric view of environmental ethics (1991: 13).

Cobb (1972: 53; 1982: 205) sees every creature as having intrinsic value, but all are not valued the same, as there is a hierarchy of values. He supports the biotic pyramid⁹ of Aldo Leopold (1887–1948), according to which humans have more value than any other animals, animals have more value than plants, and so forth, and that biotic organisms are more valuable than abiotic organisms. Organisms also depend on the sacrifice of other organisms for their growth and survival. In the case of animals, mammals like tigers and lions must eat the meat of other animals, while cattle, deer, goats, etc., eat plants. Humans are not the only ones that consume other creatures.

Cobb advocates for a biotic pyramid that retains humans at the peak (1972: 55–56). The ecosystem is a cycle where every organism depends on

another organism for its survival, and without this interdependency there is nothing. Everything is important and significant to everything else, and therefore, everything is entitled to its own intrinsic value while also having instrumental value to others. It is equally true that humans have their own value as sentient and responsible animals, but we are also instrumentally valuable. Like every other animal, after death, our bodies become the food for other organisms. Therefore, even being vegetarian does not change anything about the sacred status of life, as animal consumption continues in nature. Even Albert Schweitzer (1875–1965)¹⁰ understood that birds needed to eat fish to survive.

What is needed, Cobb suggests, are principles of justification (1972: 55) based on compassion that guides our use of nature. Unnecessary consumerism and luxury are not justified. Human beings are not only rational animals but also responsible ones, so our rationality and responsibility should guide us. We need to reform our lifestyles in order to safeguard every component of the natural world (Cobb 1992: 34). A responsible lifestyle is possible when humans see themselves as a partner in the process of healing and growth of the natural world. For Cobb, this partnership carries a responsibility where mutual relationship, not domination, is our imperative (Cobb 1972: 124).

To some extent, Cobb's bio-centric view of the environment also includes eco-centric, eco-feminist, and practical environmental approaches. Though Cobb's arguments for hierarchical value systems and biotic pyramids have some grounding in anthropocentrism, he disproves a radical anthropocentric approach by referring to Biblical sources and theology. In principle, Cobb is not satisfied with the traditional mainstream anthropocentric view of the environment, and this dissatisfaction inspires him to develop his own arguments for a bio-centric view of nature.

Cobb is aware of modern radical environmental movements like "earthism."¹¹ In his work (1999a: 35), Cobb identifies this movement as a challenge to "economism."¹² Cobb (1999a: 40–41) agrees with the way earthism promotes ecological equilibrium over economic growth. In his view, as the movement is getting more popular (Cobb 1994: 41), it can help shift the global economy from uncompromising economic growth to sustainable development (Cobb 1999a: 40–41). Cobb appreciates earthism from a pragmatic point of view, stating:

today only earthism can function as a unifying center of a healthy and desirable opposition to economism. Only it can generate the passion and energy, the level of commitment, that is needed.

(Cobb 1994: 40–41)

On the other hand, he is also a major critic of this movement, calling it "scientific materialism" (1999a: 180) and arguing that it replaces God with the Earth as the object of devotion (1994: 40). For him, it is not possible to

consider Earth as a replacement or in distinction to God (Cobb 1999a: 179). He compares earthism with idolatry (Cobb 1999a: 7) and does not support it from a Christian eco-theological perspective (Cobb 1994: 40). For the same reasons, he is also dubious of “the Gaia hypothesis,” though he appreciates some aspects of it (Cobb 1992: 103–104). As Cobb has clearly said, the better alternative for our modern world is to see the Earth as a living and sacred thing, but we should not return to worshipping the goddess “Gaia,” as the ancient Greeks did.

Cobb presents a comprehensive picture of the debates on some influential environmental approaches beyond anthropocentrism (Cobb 1992: 101–105). He begins with the animal rights movement, which decries the abuse and misuse of animals in the name of consumption and scientific experimentation. Their popular slogan is “we should live and let (others) live,” But in practice, this is not possible, given that the consumption or use of one creature by another is part of natural law. Logic instead suggests we apply a virtue ethics that allows only justified consumption or alteration of the natural world (Ibid.). Human beings should show compassion toward domesticated and wild animals.

In Cobb’s view, “deep ecologists” believe that humans must have a profound spiritual feeling and connection with non-human creatures, thus humans should remove the distinction between themselves and the rest of creation. By giving up things like racism and sexism, humans are advised to see themselves – as a whole species – as an inescapable part of the whole ecological system. For deep ecologists, as the concept of our special status causes us to exploit nature, humans should forget their so-called distinctive identity. But in Cobb’s view, a deep ecological approach is not a true balancing method. Cobb notes that social ecologists criticize deep ecologists for suggesting that humans forget their human identity and merge with the natural world. Instead, they see a better solution in changing the organizational patterns of human life. For social ecologists, the villain is capitalism, so humans should fight first against capitalism and its ruthless exploitation of both humanity and the natural world. Alongside social ecologists, eco-feminists are also raising strong voices against human oppression, claiming that mere organizational change in human society is not sufficient, but rather that we must completely destroy the patriarchal social order. Eco-feminists argue that male domination exploits and tortures women and nature alike, so only a post-patriarchal social model can enable ecological sustainability.

Cobb notes that deep ecologists, social ecologists, and eco-feminists have been attacked by those who promote practical methods like sustainable agriculture. Such persons argue that they (deep ecologists, social ecologists, and eco-feminists) do not, for instance, teach farmers how to produce foods in a sustainable way. Idealists like deep ecologists forget that uncultivated nature cannot sustain humanity and that agriculture is necessary. Similarly, animal rights movements have also failed to provide a sustainable model for

agriculture. For advocates of sustainable agriculture, we must get back the traditional wisdom of farmers who worked without modern science and technology.

Theorists of environmental sustainability attempt to identify the core problems that lead to environmental degradation. They argue further that humans cannot wait for Marxist socialism, a post-patriarchal society, profound spiritual transformation, or the return of traditional agriculture, to solve the current problem. For them, rapid environmental degradation happens through the use of nuclear and fossil fuels, and their focus is on how to reduce these and increase the use of renewable energy sources, emphasizing environmentally-friendly methods like solar, wind, hydroelectric, biomass, etc. Cobb views such people as modest, practical, and inclusive in approach, working from grass-roots levels. Their primary programs are planting and preserving forests, reducing resource consumption, and promoting environmental responsibility. Their work has supported the social-environmental movements, especially popular in European countries. Germany, for instance, has a vibrant green political movement (Cobb 1992: 101–105).

Despite the limitations of said initiatives and activities, Cobb appreciates their engagements in the field. He acknowledges the recent role of churches in teaching “that human beings are not the only intrinsically valuable part of God’s creation” (Cobb 1992: 100), though such teachings are not enough. Cobb suggests that Christian churches must reform their own theologies and policies (Ferre 1993: 360). In Cobb’s view, traditional notions of stewardship and environmental ethics are not sufficient for taking care of God’s creatures. Though “stewardship” refers to some human responsibilities for the natural world, it still supports a human-centric view – even our role as caretakers fails to convince humans to accept the intrinsic value of the environment. Though environmental ethics does focus on the innate value of the natural environment, it does not talk about the modification of our present worldview of nature, which is largely responsible for the ecological crisis, as it lacks the deeper spiritual feeling that religious ethics can provide. However, both the Christian concept and (secular) environmental ethics can be effective if a consciousness of deeper human–nature interconnectedness is present. This realization convinced Cobb to view the issue from a process theological perspective.

Cobb’s Ecological Model

In his writings (1972; 1982 with Birch; 1989 with Daly; 1994; 2007), Cobb does not limit his ecological understanding to theoretical discussions but rather presents practical frameworks for a deeper realization of the essentiality of an ecology-based society. In his view, the sustainability of our ecological system is absolutely significant in the sense that “every change in one part of the ecology affects the whole system” of human society as well as the natural process (Cobb 1972: 28). With such an understanding, Cobb

implores humanity not to destroy the ecological equilibrium for the sake of their current technology-based civilization, but rather they must be fully attentive to the essentiality of ecological sustainability, wherein each individual organism is interconnected with all other biotic and abiotic components of the environment (Ibid.).

Cobb's projected ecology-based society enables a sustainable society that includes all biotic and abiotic organisms of the environment by providing sufficient space for every organism with a due portion of participatory compassion. For Cobb, this society would be based on a participatory concept where dominance or negligence is disallowed and every organism is evaluated according to its participatory contribution to environmental sustainability. In Cobb's view, mutual understanding and cooperation is this society's guiding mantra, and competition is allowed but not extinction. The basic characteristics of Cobb's ecological model for a sustainable society are discussed below.

A Life-based Metaphor for the Planetary Environment

For Cobb, behind our current ecological crisis are our problematic world-views of nature. After identifying the genesis of environmental problems, Cobb realized that the dominant cultural understanding of nature was primarily based on the metaphor of the machine, but now such views have been challenged by modern biological science. Modern biologists argue that the mechanistic worldview of nature is quite unfit to explain the origin and development of living organisms and their interconnectedness within themselves and with other biotic and abiotic forms. Biological life and its interrelation cannot be interpreted with a mechanistic view of nature, as such sees natural phenomena only as material substances only, rather than as the unity of matter, mind, and spirit. Cobb began to study modern biology for a better understanding of ecology, even collaborating with biologists like Charles Birch (1918–2009) to write *The Liberation of Life* (1982). In their work, Birch and Cobb (1982) attempt to present “an alternative metaphor for understanding the world, a metaphor drawn from biology itself” (Soneson 1994: 158). Presenting an “ecological model,” they argue that the world does not look like a machine, but rather is a great organism consisting of “many interdependent living organisms” (Ibid.).

With this biological and ecological understanding, they promote a metaphor of life as opposed to a metaphor of the machine. Their alternative metaphor helps to reconstruct the modern view of the world and to bring some practical solutions to the environmental crisis. According to this model, human beings are not merely a part of nature but are also completely dependent on it. The ecological model, they argued, can promote a deeper human awareness about our inseparable, participatory connection with all other living and non-living parts of nature, paving the way to viable solutions.

Ecological Asceticism

In Cobb's view, an ascetic lifestyle is essential for restoring the human–nature balance. He calls it “an ecological asceticism” (1972: 58, 63), supporting a radical modification to our consumer-based lifestyles. To signal such a necessity, Cobb and his family modified their own lifestyles, consuming less energy and goods (1992: 34). For Cobb, ecological asceticism fosters a stronger mental commitment to reducing destructive activities (1972: 58).

According to Cobb, this commitment first starts with the individual – if everyone commits themselves to ecological asceticism, this automatically extends itself to all levels of society. To him, an ascetic ecological lifestyle does not mean deprivation or inequality of life, but rather a self-responsible way of living, where everyone is satisfied with basic needs (Ferre 1993: 360). He calls for religious leaders, community leaders, public agencies, and state and world leaders to encourage humans to adopt this lifestyle and establish contextually- and culturally-appropriate policies supporting it.

Living Simply

Referring to the radical teachings of Jesus Christ, Cobb (1992) reminds Christians to maintain a simple, non-consumeristic lifestyle, which is especially necessary considering the imminent environmental danger. Cobb (1992) argues that a good quality of life is possible with reduced energy consumption, community-based economic policies, and traditional agricultural systems. He appreciates the initiative of Paolo Soleri (1919–2013)¹³ to “build human habitat in a way that would enable human beings to live comfortably and healthy without consuming heavily the resources of the earth” (Cobb 1992: 3). Cobb recommends a simple lifestyle not just for greater happiness, but because it is ecologically necessary.

The Biospheric Vision

Cobb blames modern human economic development for the overuse of natural resources at the expense of other forms of life (Daly and Cobb 1994: 252). Citing the Bible, Cobb claims that God is the absolute owner of the land and God expects all creatures to share it fairly (Daly and Cobb 1994: 391–393). Humans must recognize this fact by granting all non-human animals the space to meet their own needs.

Supporting Aldo Leopold's land ethics, Cobb urges humans to see land as a community not as a commodity, as a space shared between all organisms. Cobb criticizes the very foundations of current economic and public policies for not considering other creatures' rights to the land. For Cobb, land should be thought of as a biosphere, and biocentrism should be adopted in economic, agricultural, business, construction, military, international, and trade affairs. Cobb proposes a “biospheric vision” as an alternative approach to

today's excessively human-centered vision (Daly and Cobb 1994: 376). He hopes that with such a vision, humans can recognize other living things as being in community with them, granting them a share in the environment and slowing down (or preferably ending) their suffering and extinction (Cobb 1991: 43).

As all beings in the natural world are interdependent and interconnected, a bio-centric model will encourage humans to be respectful and responsible toward the Earth as a matter of faith. According to this model, every creature is evaluated as being a microcosmic part of the macrocosmic universe. All biotic organisms have a role in environmental sustainability. For Cobb, the realization of life from the micro-level to the macro-level and of its inescapable connectivity allows humans to be more sensitive toward other forms of life. Furthermore, he contends that with such a deep contemplation of life, humans can reshape their ethical views of nature. In regard to consuming meat and animal experimentation, Cobb recommends using a compassionate virtue ethics. There should be proper justification for using animals in this way, and with a minimum of suffering (Birch and Cobb 1982: 155).

Cobb thinks this vision can deepen our current ethics of values, rights, sharing, and responsibility. Without a life-based model, how can humans be ethically conscious about the environment? Cobb's argument seems right in the sense that people first need to have a clearer holistic vision of life. If humans can better know that the welfare of one creature is the welfare of all creatures and that the suffering of one creature is the suffering of all, it would be easier to behave more responsibly. A healthy human society depends on a healthy environment, and a healthy environment is determined by the health of all biotic and abiotic elements of nature. Ergo, environmentalism is rational.

A New Ethical Life

In Cobb's view, our current ethics are not sufficient for dealing with today's environmental problems. He thus advocates for a new kind of ethical life that recognizes the intrinsic value of every living thing through greater moral and metaphysical understanding (Birch and Cobb 1982: 151, 153). He considers this new ethical life to be religious life, contending that a religious person can be more easily disciplined than a secular one. Cobb thinks God is the best example of an ecological model of life (Birch and Cobb 1982: 195), arguing that all life comes ultimately from the supreme Life, i.e., God, and it is God who sustains life in a systemic way, connecting us with one another and with God. Cobb reiterates that all living organisms have their own inviolable value. Humans should consider the suffering or happiness of all things, including themselves, as God shares in this suffering and happiness. With these eco-spiritual understandings in hand, Cobb calls upon us to think ethically when interacting with the natural world.

Ecological Biology

Being a critic of current bio-technological advances, Cobb talks about the value of ecological biology (1982 with Birch: 231). He argues that though recent biological advances can bring human comfort, cure diseases, and reduce suffering, these are not free from potential evil, including immoral costs to the environment. Such activities do not necessarily encourage a deeply-rooted ecological understanding, but rather often challenge ecological sustainability. For instance, while genetic engineering may have many benefits, it artificially modifies natural biological patterns, risking extinction in some cases. In this regard, Cobb (1982 with Birch: 232) advocates an ecological biology, where human beings know how to relate and interact with other biological organisms. Cobb contends that this biological knowledge can aid environmental sustainability.

Ecojustice

By using the term “ecojustice,” Cobb means a just relationship between humans and the natural world (1992: 21). Cobb argues that justice generally deals with equality, but absolute equality is an abstract term and not possible to implement (1982 with Birch: 236). Following John Rawls’ (1972) model of justice, Cobb contends that absolute equality is not a necessary condition for justice. Justice means providing an equal opportunity for all to develop their creativity. In this sense, all living forms are entitled to receive an equal opportunity to grow and survive. This kind of justice is already present in the natural environment. But the responsibility of humans is to ensure this justice to all other biotic organisms. Absolute freedom ultimately leads to excess injustice and the triumph of some lifeforms over others. In contrast, nature gives, more or less, *equal opportunity* to all living organisms according to their capabilities, while maintaining checks and balances.

Humans should exercise their roles in compliance with this natural system, which Cobb considers ecojustice. As responsible partners in the same system, humans should show deeper respect for other parts of the natural world (Cobb 1992: 21). The problem, Cobb observes, is that Christian ethics mainly address justice issues in relation to human rights, social security, social welfare, etc., while ignoring ecology. What is needed is an ecojustice that determines human responsibility toward the natural world.

Revitalizing Traditional Wisdom through New Interpretations

Cobb (2010) blames ultra-secular ideology for the decline of traditional wisdom. For Cobb, ultra-secularist ideology cannot offer a viable alternative to the traditional spiritual worldview, but rather by viewing nature as valueless it added to the spiritual bankruptcy that has degraded the environment. For a sustainable world, we must revitalize the old wisdom of

our cultural, religious, and spiritual traditions. But these traditions are not without flaws; they need critical, creative reinterpretation. Cobb argues that even the ancient prophets sought to reform religious faiths and practices in response to a changing world, so therefore modern religious scholars and leaders should reinterpret and contextualize their faith and spiritual traditions to account for our present environmental problems.

Prioritizing Sustainability

The concept of sustainability is frequently used in development, but it originally comes from discussions on the environmental crisis (Cobb 1982 with Birch: 239). For Cobb, environmental sustainability means ecological sustainability (1982 with Birch: 240). Without ecological sustainability, there is no sustainability of the environment. Cobb recommends that humans learn from nature about how to sustain themselves and the environment (Ibid.). With various ecosystems – rain forests, coral reefs, rivers, mountains, and the like – nature sustains itself. In contrast, uncontrolled and unethical human activities overtax these ecosystems. Human beings need a basic knowledge of ecosystems and their importance for a sustainable environment. Cobb believes that when humans understand the interconnectedness of Earth's ecosystems (including their part in it), they may be more convinced to compromise their own short-term material benefits for its sake.

Cobb also offers some practical steps humans can take. For instance, he believes in ending arms production, reducing the use of fossil fuels, and adapting human lifestyles to ecological needs. He calls for all nations to reach a consensus on the ecological crisis and work toward bringing their populations into ecological equilibrium. Cobb (1982 with Birch: 248) criticizes modern agricultural systems, arguing that these systems are not ecologically sustainable; for instance, they use pesticides and chemical fertilizers that decrease soil quality and harm animals. Instead, he proposes a return to traditional agricultural systems. His Chinese and American rural farming initiatives are worthy examples of this.

Cobb is very concerned about the planet. Even without the threat of global warming, humanity's overuse of natural resources would threaten future generations. Nature has its own capacity to repair and replenish itself, but this system is put under great pressure by humanity's greed. The possibility is that the system itself might collapse, and human beings should keep that in mind when they consider their impact.

Balancing Christianity, Nationalism, and Economism

In assessing the origin and development of Christianity, nationalism, and economism, Cobb (1999a) identifies the many flaws of each. He shows how Christian egalitarianism was transformed into "Christianism" in the

medieval period, how nationalism superseded Christianity, and how nationalism has now been subordinated to economism. Each stage is marked by a lack of attentiveness to the ecological equilibrium, but each stage also provides lessons on how to do better.

Integrating a Modified Christian/Church Role in Ecological Sustainability

Aside from St. Francis of Assisi, Cobb was unimpressed by the environmental ethics of medieval Christians. Renaissance humanism further developed an extreme human-centric approach with a mechanistic-materialistic worldview that utilized the scientific and secular knowledge of the time. The Church did not have a satisfactory response to such a dangerous anthropocentric view of nature, and, in fact, many scholars and leaders endorsed it using the misreading of the Genesis narrative. Having noted the second creation story of the Bible (Gen. 2:15), Cobb disputes any Biblical support for the anthropocentric approach and calls for correction (Cobb 1971: 32). Referring to St. Francis and Albert Schweitzer, Cobb urges Christians to redirect their love and affection to the non-human realm. He emphasizes the revitalization and reconnection of humans with nature. For him, stewardship and co-creaturehood should be frequently emphasized over the “conquest and dominance” views of nature.

Connecting Process Theology with the Pain and Joy of Nature

As a process theologian, Cobb connects faith in God with the reality of nature. He criticizes the reduction of God to human moral and religious experiences, believing such does injustice to God. God should be seen in a comprehensive way, insofar as God’s creative power reveals itself not just through humanity, but through all life. Not only this, God experiences joy and misery along with His creatures. Cobb urges Christians to realize that God also suffers when His creatures suffer. To cause suffering for other beings without justification, i.e., to misuse and abuse of animals, is to impose suffering on God. He unhappily points out that human beings are of a state that they only realize this if “they were forced to recognize that the consequences of that abuse threaten human well-being in a massive way” (Cobb 1991: 43).

Having established such a metaphysical understanding of God, Cobb contends that if God is worshiped in the interrelated and interactive sense, a participatory sense of belongingness will overcome our patterns of abuse. Enlightened with such Spirit, we cannot but change our ways. Much of this depends on the Church’s willingness to change its pastoral and pedagogical orientation: Cobb notes that, in the past, economic prosperity was viewed as a Christian social goal, but now Christian teachings must be directed toward the environment.

Only if we understand God as a “God-who-suffers-with” can we truly respect and protect the ecological world. Only when Christians feel that they have the responsibility to reduce all kinds of suffering and that they are inescapably connected to nature’s fate, will they reform. Cobb is optimistic that Christians will soon realize their responsibility toward other creatures and will adopt a healthier biospheric approach to nature.

Sustainable Agricultural Systems

Cobb (1972) criticizes modern agricultural systems because of their destructiveness. He instead advocates a traditional system of cultivation, growing, harvesting, and preserving. He criticizes the use of chemical fertilizers and pesticides in agricultural lands. Though fertilizers, herbicides, and pesticides may help to grow crops quickly, prevent disease, and increase their production capacity, they carry health risks to humans and other organisms. Furthermore, such chemicals reduce the quality of the soil. Instead, Cobb recommends using organic fertilizers and other traditional means to protect crops. Worms and other insects should be tolerated; Cobb insists we recognize the rights of other species who we share space with, even in cultivated lands. Humans should not kill any other organism for economic benefit (Daly and Cobb 1994: 252; 268; 272).

Balancing Power and Politics

Cobb blames current government policies for prioritizing economic and military concerns over ecological sustainability (Birch and Cobb 1982: 295). For him, unhealthy and unethical competition among world nations over trade and defense fails to acknowledge the environment. The production and marketization of arms threaten existence. Should war break out, the first casualty will be the environment. Overcoming this threat thus demands more balanced government policies and bilateral and multilateral agreements between the superpowers and other states. Peaceful coexistence among nations and a compromising attitude toward others can pave the way to a more balanced and sustainable world.

Environmentally-Friendly Village and Urban Life

Cobb (1972) criticizes modern city life for its lack of consideration for traditional ways of living. The transformation of villages into semi-urban communities dissatisfies Cobb. Due to this process, the human–nature relationship, which was a basic feature of traditional village life, is collapsing. Not only should this be prevented, but Cobb also recommends keeping urban areas in touch with nature as much as possible. Cobb believes ecology-based villages and urban life are essential for sustainability.

Sustainable Development Policy

Cobb is not against development, but he argues that it must be ecologically sustainable and proposes an ecological model. He argues that the conventional model of development works from the top-down, prioritizing global market economics, but his ecological model would work from the bottom-up, prioritizing local creatures and ecosystems. This model of course also prioritizes green energy and eco-friendly urban life. Philosophically, it places upmost importance on the liberation of all life forms, from the cell to the community (Birch and Cobb 1982).

Empowering Women

In his ecological model of development, Cobb advocates for a just and sustainable role for women (Birch and Cobb 1982: 309) in development. It has been observed that women are more sensitive to changes in the natural world, and thus their role is just as important as men's. For Cobb, women should be empowered so that they may play their environmental role more freely. Cobb recommends that humans again turn to the metaphor of nature, where everything acts in its own way but is nonetheless interconnected. If this understanding was applied in human society, women would be allowed to take their rightful roles and responsibilities for the Earth.

Renewable Energy, Green Technology, and Environmentally Efficient Transport

Cobb's system requires a reduced dependency on the fossil-based energy sources that pollute the air and warm the Earth with carbon emissions (Cobb 1972; 1992; Birch and Cobb 1982: 318–319), instead encouraging renewable energy sources (solar, wind, biogas, etc.) to fuel vehicles, industry, and power plants (Cobb 1972; 1992). Though they do not emit carbon dioxide, Cobb considers nuclear energy too risky. Similarly, Cobb does not support hydroelectric power due to its disruptive effects. Cobb (1972) focuses on an environmentally-friendly transport system that bans private vehicles in favor of public transport, and encourages biking and walking (Cobb 1972). In order to build a truly environmentally-friendly city, he proposes a transport system that will be free from all motorized vehicles (Birch and Cobb 1982: 323–325). He considers the ecologically-oriented architectural designs of Paolo Solerio¹⁴ to be in accordance with this vision (Birch and Cobb 1982: 327).

Tolerable Population Size

For Cobb, environmental sustainability requires a sustainable population size. Our current environmental degradation is deeply related to human

overpopulation. More people require more houses, more food, more clothing – more resources and products in general. Meeting these demands comes at a huge cost to the environment. Cobb suggests reducing our population level to a size that meets the natural capacity of the planet (Cobb 1992; Birch and Cobb 1982: 309). To do so, he calls for birth control, supporting a one-child policy. He even advocates for imposing taxes on families that have more than two children (Cobb 1972: 67; Birch and Cobb 1982: 309). He proposes making contraceptives more accessible (Ibid.), creating more opportunities for women outside the family, keeping sex education mandatory for all adults, and attaching a social stigma to large families (Ibid). For him, it is essential to foster moral concern for stable and sustainable population size.

Rejecting Economism by Reforming Economic Theories and Functions

For Cobb, modern society is based on economism (1994: 28), which sees human beings only as economic beings. In his view, economism is the ideology of our modern selfish economic system (Cobb 1999a), for which the priority is economic expansion. Modern nation-states view success in economic terms, believing that economic growth improves the general economic well-being of people (Cobb 1999a: 5, 28). As a result, state-based nationalism is now subordinated to economism (Cobb 1999a: 21). For Cobb, this economism has triggered environmental degradation, taking nothing into account for ecological well-being.

Rejecting economism, Cobb proposes a comprehensive, balanced, and responsible approach that restricts economic activity in order to guarantee social and ecological justice. He prioritizes local communities and their ecological well-being. He criticizes Gross Domestic Product (GDP) and Gross National Product (GNP) as forms of assessing national well-being, arguing that these ignore environmental data and just inspire us to produce without consideration of ecological sustainability. For Cobb, such an economic system is unsustainable and harmful. At their current rate, commercial, service-oriented, and industrial production exceeds our global ecosystem's capacity to absorb the damage. Cobb instead suggests measurements based on the growth and well-being of people, which in turn depend on the health of the community and environment (Cobb 1992: 73). For this reason, Cobb suggests abandoning GDP/GNP and instead adopting an Index of Sustainable Economic Welfare (ISEW) in order to assess the functional capacity of an ecosystem to sustain economic development.

Cobb observes an unhealthy economic competition between nations that exploit natural resources. In this system, some nations get richer while other nations remain poor. Much of the world economy is controlled by corporate groups who are more obsessed with economic gain than restoring ecological equilibrium. In this system, a select few become richer while most people are

denied economic opportunity and social justice. Again, such a system is unsustainable, even in rich countries. Cobb blames global warming, ozone layer depletion, sea-level rise, extinctions, etc., on these global economic systems driven by selfishness. These systems not only destroy ecological equilibrium but also create an unequal human society. Cobb chides economists for not grasping the value of ecosystems. For Cobb, even the economic profession is an obstacle to solving the ecological crisis.

Cobb does not neglect basic economic needs, but he criticizes uncontrolled economic activity in which humans are seen merely as consumers and the environment as the provider. Cobb thus talks about new economic theories based on an ecological model of life (Cobb 1994: viii). In Cobb's view, the neoclassical economic foundations were based on the anthropocentric monopolization of land for human purposes, and he criticizes these very foundations of our current economic and public policies for not considering other life forms. He thus feels it is necessary to have a world government that can impose strict measures to prevent further destruction. Through a critical evaluation of our current economic theories and functions, Cobb recommends a complete reversal in our methods of economic assessment, free market economics, international trade and commerce, and unhealthy competition in business.

Some scholars consider Cobb's vision a utopian plan (Daniel and Ehrlich 1990: 346) while others label it as ruinous and destructive (Kasun 1991: 46). Even Kasun accuses Cobb of putting forth "a wild plan" that wants to marginalize and "dehumanize the human race" (Ibid.). However extreme or not, Cobb does at least present a new idea for ecological sustainability for us to ponder. A superficial study of Cobb's proposed economics may present it as anti-economics and anti-markets, but a more careful reading of his works (1982 with Birch; 1989 with Daly; 1991; 1992; 1994; 1999a) can remove such misunderstandings. Cobb is not against economics (Power 1993: 85), he just suggests conducting economic activities in ecological balance (Daly and Cobb 1994: 229). For him, a sustainable ecosystem is a precondition for a sustainable economy. He argues that economics should consider ecological costs (Cobb 1992: 72) so that policymakers, producers, and consumers can make fair and sustainable decisions. This approach, Cobb argues, may drive people to less consumption and production toward a simpler, more sustainable, life.

Bioregionalism: Balancing Trade and Commerce by Saving Local Ecosystems

Cobb blames the present market system for weakening community structures and sustainable ways of living. Cobb is not anti-market but does intend to reform market-based policies so that human behavior is not controlled solely by free market economics. In order to reconstruct the "market mechanism" for a sustainable society, he proposes bioregionalism

as an alternative. Cobb emphasizes a participatory and cooperative financial market system where ecology is given consideration. Cobb's proposal gives priority to local communities, arguing that economic, industrial, and marketing activities that are conducted locally can better attain ecological balance. Though smaller in size, such a system is more suitable for healthy and sustainable economic development. With people's participation, Cobb believes his proposed system can challenge our modern global – and unsustainable – systems. Jobs would be created primarily by and for local people, goods would be produced largely for meeting the demands of local communities, and commercial business would be conducted locally.

This system, envisages Cobb, would concentrate on local environmental conditions more than economic benefits, so whenever something is judged harmful to the environment, both producers and consumers will have to agree to work together and find alternatives. Cobb's bioregionalism involves regulating population sizes, use of natural resources, and use of energy. As for any excess, Cobb proposes imposing energy, land, and ecological taxes so that producers will be discouraged from overproducing and consumers discouraged from overconsuming. Of course, essential products should be tax-free while luxury products would be highly-taxed. Cobb advocates for the community ownership of land instead of private ownership. Thus, "a new localised vision of human self-government" (Northcott 1996: 308) is part of Cobb's proposed bioregionalism.

Why Cobb Went from a Theological Perspective to an Economic and Political Perspective

If we go through his relevant works, we can see a gradual shift from the theological backdrop of the ecological crisis to a more economic and political focus. Why this shift? Below is an effort to answer this question. We note that the shift is not sudden, and there are some logical reasons Cobb went from a faith perspective to a more secular point of view.

Cobb is basically a theologian who launched his career from within Christian social ethics. Ecological issues were not his first interest, but during his postgraduate studies, he became strongly influenced by the process philosophy of Whitehead, which made him more aware of the deep interconnectedness between humans and nature through their shared connection with God. This made it possible for him to study nature from a Christian perspective. Later on, Paul Ehrlich's *Population Bomb* (1968) and White's seminal thesis (1967) motivated him to see the theological roots of the ecological crises. Based on the process theological understanding, Cobb started to write on environmental issues and develop his ecological model (1971; 1972).

For a deeper understanding of ecology, Cobb studied biology and worked with Birch and Cobb (1982), coming to see and understand the essentiality of all living forms for environmental sustainability. He developed his

biospheric vision, which along with his ecological model, sought to reform the materialistic-mechanistic perceptions of nature by considering humanity's participatory function alongside other biotic organisms. Within these theoretical discussions, God is rendered organic rather than static, and similarly, the natural world becomes a community, not a commodity.

Later on, Cobb realized that human perceptions of nature are deeply related to modern economics. For him, until there was a significant reformation of economic philosophy, there could be no possibility of actual, practical reform. Cobb observed further that behind every destructive behavior there was an economic interest, and thus he was convinced that the roots of the present ecological crisis lay in the modern economics system. This motivated him to study economics, becoming more familiar with neoclassical economic theories. Cobb invited Harmon Daly to work with him to prove the flaws of modern economic theories with respect to sustainable ecological development. Cobb understands that without providing a workable and sustainable economic plan, it would be nonsense to criticize the very foundation of the current economic system, so with Daly, Cobb offers some theoretical frameworks for an alternative economic system.

Cobb has also criticized government policies and political leaders for implementing selfish and destructive economic policies. In his view, political leaders and policymakers are too busy working for short-term gains and quick money (which the current system is quite good at!). Apart from this, Cobb is a serious critic of power politics among nation-states, especially competitive arms building and trade. There is a competition between and among states both in producing and purchasing arms. A huge amount of a country's wealth is spent on weapons, depriving its own citizens while also risking their total destruction in war. And wars are catastrophic for the environment. Considering this, Cobb tries to address geopolitical issues from a perspective of sustainable peace and environmental sustainability, arguing that peace is essential for ecological balance. While discussing his ecology-based economic system, Cobb has not overlooked geopolitical power and conflict.

Needless to say, modern economics has disappointed Cobb in many ways. In Cobb's view, humanity has, at all social levels, been transformed into an economic species and economics into an ideology – economism. Economism gives zero consideration to ecological matters, and modern science and technology are its tools. By following this ideology, modern humans put an unbearable burden on the environment by denying the rights of the other species we share it with. Modern economic theories and state policies place humanity at the center as if we were the owners of the Earth. With such an extreme human-centric approach, how is environmental sustainability possible without reforming individual, corporate, and government habits? How can a state secure and defend itself in an environmentally-friendly way? These are the very practical challenges that we cannot ignore.

As Cobb sees it, if these issues are dealt with properly and modern humans are really convinced that sustainable development is more essential than economic affluence and national supremacy, only then is it possible. Cobb thus shifts his academic interest from more theoretical discussions to certain practical questions and actions. His earlier works dealt with the theological roots of the ecological crisis while his latter writings deal primarily with economics and politics. Nowadays, Cobb is developing some theoretical frameworks for an ecological civilization in opposition to our current technology-based civilization. Cobb envisions a post-industrial world as an ecology-based civilization, where everything is designed in line with ecological sustainability.

A Critical Analysis of Cobb's Eco-Theological Views and his Ecological Model

Undoubtedly, Cobb has extensively worked on environmental issues from a Christian faith perspective and offered an ecological model for sustaining the environment. His ground-breaking theoretical works can convince human beings to reacquaint and reconnect themselves with the natural world and behave more responsibly toward it. In contrast to destructive modern economics, Cobb's proposed ecologically-friendly system seems a timely prescription for our present-day problems. However, despite its merits, Cobb's eco-theological and ecological models have limitations.

Cobb's process theological understanding of the environment can be criticized for denying the traditional attributes of God and the concept of a single Ultimate. Like other process theologians, Cobb rejects God's omnipotence and claims that God is dependent on creation. Though Cobb does not ignore God's static being, he focuses on God's *becoming*, God's loving, and God's creative power. Furthermore, he adds another "Ultimate" – "the Cosmos" to Whitehead's two Ultimates – "God" and "Creativity." Thus Cobb actually believes in *three* Ultimates – "God," "Creativity," and "the Cosmos." Each of Cobb's process theological conceptions of God presents a threat to traditional Christian theism and ultimate reality. In SlimJim's view (2010), Cobb's process theism is "doctrinally at odds with Christianity" and "spiritually dangerous" for Christians, because process theism presents some new views of God and ultimate reality that are in contradiction to the biblical concept of God's omnipotence and Christian practices. SlimJim's critique of Cobb's process eco-theological approach seems not unjustifiable, especially given Cobb's clear support for multiple Ultimates and God's dependence on creation. It is naturally difficult for most Greek Orthodox, Roman Catholics, and Protestants to accept that God is dependent on creation and is divided into these separate divines (in distinction to the Trinity). Possibly by focusing on God's intimacy and inescapable relationship with creation, Cobb cannot help but understand the Christian God in such a way. But can the biblical concept of God be compromised thusly? In a similar vein with SlimJim, Bruce

Demarest (1987) refutes the basic foundation of process theism by arguing that process theological views of God and the Ultimate are not grounded in the authoritative Christian scriptures, but rather in the philosophy of Whitehead. Demarest seems right in the sense that process theologians refer mostly to the philosophy of Whitehead rather than the Bible and Christian tradition when discussing the relationship between humans, nature, and God. In response to this allegation, process theologians might contend that they merely interpret this interrelationship using Whitehead's process philosophy, but this is not convincing.

On the other hand, Cobb's eco-theological views of environmental sustainability may drive secular environmental ethicists and activists away from the discourse. He recognizes that the ecological crisis is a global issue, so it is not only an issue of theology or religion, but his approach deals specifically with a Christian (process) theological view of the environment. As a Christian eco-theologian, he is right and praiseworthy to be offering a faith-based approach, but for multicultural and multifaith purposes it still has deficiencies in articulating a combined framework for reducing environmental degradation.

Though Cobb's valuation of the environment suggests a bio-centric approach, it is not exactly like this. Northcott notes that Cobb's approach to environmental sustainability lies in a place between human-centric and eco-centric approaches (1996: 161), and it is not a completely bio-centric approach. Northcott's argument seems right to some degree, because Cobb does not concentrate on any specific value approach, but rather focuses on how to rectify the current perceptions of nature in terms of the human-nature relationship. Furthermore, Cobb never claims his approach is a bio-centric approach and never attempts to make a synthesis between human-centric and eco-centric approaches. On this point, Northcott seems wrong to essentialize Cobb's approach in a place between human-centric and eco-centric approaches.

Palmer connects Cobb's value approach of the environment with an anthropocentric approach, because Cobb still supports human superiority to some extent, recognizing a hierarchy of beings or grades/ranks in value (1998: 217–223). Palmer's evaluation of Cobb's process eco-theological vision seems justifiable. Cobb recognizes the intrinsic value of nature, but his understanding of the hierarchy seemingly ensures a privileged position for humans over other animal and plant species. On the other hand, Palmer's assessment seems unnecessary. In nature, there are different levels of sentience, and certain animals consume other animals. Attributing values to different forms of life seems not only justified but common sense. Arguably, animals are of greater value than plants due to their sentience. We believe Palmer is mistaken in calling Cobb's approach anthropocentric.

In presenting his own model for an ecology-based global society, Cobb seems more idealistic than realistic. The modern world is so complex in terms of population size and geopolitical interests – how can Cobb's

ecological model of life and development work properly in such a context? His model might be applicable in some Western countries like Norway, Finland, Sweden, Denmark, etc., which have smaller population densities, are well-educated and are comparatively rich. But his proposed model could not fully work in countries like Bangladesh, India, or Pakistan, where there are many people, most of whom are very poor. For these people, what should come first, the question of environmental sustainability or their own survival? On this point, clearly “human life precedes the environment.” Despite this fact, Cobb’s ecological model, if applied, can still generate a sense of belongingness and responsibility toward the natural world.

Cobb’s proposed reforming of Christian theology may create misunderstandings among Christians. His intention is good, but the way Cobb proposes “a new Christianity” (Cobb 1992: 95–96; Cobb 1972: 55–56) may bristle mainstream Christian communities. It would have been better not to say “a **new** Christianity” (Ibid.) because that raises questions of heresy or unorthodoxy. Instead of using such a phrase, it would be better to merely recommend some new Biblical interpretations regarding the God–human–nature relationship.

Some scholars might criticize Cobb for blindly accepting White’s (1967) arguments. As noted before, White’s (1967) thesis is widely criticized by both religious and non-religious scholars. Though White proposes adopting St. Francis’s Christian approach to addressing environmental issues, his criticism of the Biblical creation story and implication of the Christian church and scholars in the ecological crisis seems harsh and immature. But by realizing some of the deficiencies of his thesis, White was more modest in later publications (1973; 1978). Yet as a Christian eco-theologian, Cobb hardly criticizes White’s controversial thesis.

In giving more importance to ecological sustainability, Cobb seemingly shows negligence regarding some moral issues related to the individual, family, society, and the fate of humanity. For instance, in order to reduce the size of the human population, he suggests accepting an extreme birth-control policy, i.e., one-child policy, sex education, free contraception, and women’s empowerment (Cobb 1972: 66–67; Birch and Cobb 1982: 309), every one of which might be criticized by theologians. Modern birth control policies are still being criticized by both mainline and conservative Christians, and some of the latter (i.e., Catholics) argue it should not be allowed unconditionally. Cobb’s proposal for a one-child policy and imposing a tax upon families having more than one child (Cobb 1972: 67) seems inconsistent with balancing population size. If his proposals were to be fully implemented worldwide the reduction would be too dramatic. If Cobb means such steps to be temporary, it might be justified, otherwise, it would create more problems.

Cobb’s proposal for sex education (Ibid.) might create controversy among scholars, as he does not give a detailed outline of what this would look like. Someone might argue that sex education leads to more sexual

intercourse among teens. Cobb cannot point to instructive guidelines that navigate such difficulties. Similarly, when he suggests distributing contraception pills freely among adults (Cobb 1972: 67), he does not think to limit it only to married couples. This may mean (to some) that Cobb supports extramarital sex, something conservative practitioners would frown upon. Likewise, his proposals for women's empowerment lack protective structures for preserving the family. From a practical point of view and in light of the moral norms of many religious and spiritual traditions, Cobb's suggestions regarding birth control policy, sex education, distribution of contraception pills, and women's empowerment (Cobb 1972: 66–67; Birch and Cobb 1982: 309) remains controversial. By reducing so much to the single-minded purpose of environmental sustainability he diminishes these religious and cultural viewpoints.

In condemning religious institutions, clergymen, and religious scholars, Cobb seemingly criticizes religion itself, especially Christianity (Cobb 1991: 27; Cobb 1972: 33), by supporting White's (1967) critical analysis of the Judeo-Christian root of the ecological crisis. Religious institutes like the church are conducted by humans. Is it not better to attribute anthropocentric interpretations of the Bible to individual scholars and leaders, rather than to the religions themselves? Religious or spiritual leaders and scholars are also influenced by non-religious factors that affect their views on the environment. Critics of religions blame should not blame faith traditions for their misguided leadership. But Cobb, as a Christian theologian, is oddly at peace with White's (1967) polemics.

Some scholars are critical of Cobb's biospheric vision. As noted earlier, Daniel and Ehrlich (1990: 346) consider this vision to be an utopian plan while Kasun (1991: 46) accuses Cobb of putting forth "a wild plan" to reduce the influence of humans on earth and "to dehumanize the human race." Though Daniel, Ehrlich, and Kasun seem very harsh to criticize Cobb's biospheric vision, it is not untrue that Cobb wants to grant more space to non-human creatures (Birch and Cobb 1982; Daly and Cobb 1994). Similarly, in proposing this approach, Cobb seems to be sacrificing human dignity for the sake of other lifeforms. Cobb's position thus seems self-contradictory with respect to his hierarchical value system, wherein humans are given a privileged status. Furthermore, in order to implement the biospheric approach, Cobb supports increasing the number of non-human creatures and decreasing the number of humans and giving over land to wildlife. If taken to the extreme, such actions could threaten human existence. Though Cobb is critical of deep ecologists, his biospheric seems quite similar.

For reducing environmental problems, Cobb recommends green science and technology (Birch and Cobb 1982: 318–319; Cobb 1972: 61–62), but for farming, he suggests traditional methods (Cobb 1972: 60). This also seems a self-contradiction, as he promotes a post-modern view on the one hand and a traditional method on the other. Does Cobb really intend to integrate post-modern methods with traditional ones?

Some scholars are critical of Cobb's bioregionalism. Pisciotta rejects the central argument of bioregionalism as immature, comparing it with a neo-Luddite solution (1996: 906). In a similar vein, Bayer (1995: 823) argues that Cobb cannot properly justify his bioregionalism due to the reality of global economics. Pisciotta and Bayer may be right in a sense that though Cobb addresses the underlying selfishness of modern economic theories, his arguments for local community- and local ecosystems-based economics seem idealistic rather than pragmatic. On the other hand, Pisciotta's and Bayer's evaluation of Cobb's bioregionalism seems wrong in that they could not grasp the true purpose of Cobb's proposed bioregionalism, which is to reform the selfish human mind and redirect compassion toward the environment.

Though Cobb (2010) rejects secularization as an ideology, he appreciates secularizing religions, even comparing them to the old wisdom of the prophets. It again seems contradictory to criticize secularism on the one hand while appreciating secularizing religions on the other. It would be better if Cobb could select some other appropriate terms to describe the process of rediscovering ancient wisdom.

Cobb uses theocentric language when talking to religious people and "earthist" language with secular people (personal communication, 27 January 2019). As the theocentric view of nature cannot support earthism, this may create a confusion: how can a person promote two opposite views? This also seems inconsistent with Cobb's own criticism of earthism. Is it just a rhetorical technique?

These small criticisms cannot overshadow the academic value of Cobb's work on the ecological crisis. Through process theology, Cobb offers some innovative ideas. And though a theologian, Cobb bravely addresses environmental issues in connection with modern economic theories. All things considered, Cobb's work deserves appreciation.

Conclusion

Cobb's eco-theological thought has shaken the Christian ethical understanding of nature by inspiring the Christian church and its theologians to divert their attention toward present environmental issues. His ecological model supports a caring mind, sympathetic behavior, shared connection, and reformed ecological behavior. Cobb's approach seems realistic and pragmatic, though it has some limitations in terms of implementation. As Northcott rightly says, "Cobb's approach is a dramatic departure from traditional Christian theism, and has much in common with the holistic, mystical and eco-centric deep ecologies" (1996: 149). Cobb does not confine his discussion only to theoretical analysis, but rather presents a practical framework for mitigating ecological crises. He successfully relates faith to philosophy and science and then presents a holistic vision of human life by correlating our economic activities with ecological health. Cobb also

talks about the need for the political will to halt environmental degradation, but he does not suggest relying completely on state power to achieve environmental sustainability. In order to work for a sustainable environment, Cobb urges modern humans to follow an ecological model of life, each as they can.

Notes

- 1 The term “process philosophy” is primarily related to the philosophical thought and works of Alfred North Whitehead (1861–1947) and Charles Hartshorne (1899–2000), albeit its historical roots are found in ancient periods. It was popularized by Chicago school in the middle of the twentieth century. Process philosophy avoids subjectivism while attempting to reconcile various human intuitions into a holistic approach. In so doing, it aims to develop a form of neoclassical realism. For details, see <http://www.iep.utm.edu/processp/>
- 2 For details, see Oliver Li (2019), Panentheism and the Concept of the Ultimate in John B. Cobb’s Process Philosophy, *Sophia*, 58: 640.
- 3 Cobb does not believe in a single Ultimate, his tripartite conception of the Ultimate comprises God, creativity, and the Cosmos. For details, see Cobb (1999b), “Concluding Reflections” in Knitter (Ed.) *Transforming Christianity and the World*, 179–186, New York: Orbis Books, 184–185.
- 4 The Bible states: “So God created mankind in his own image, in the image of God he created them; male and female he created them.” God blessed them and said to them, “Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish in the sea and the birds in the sky and over every living creature that moves on the ground” (Gen. 1: 27–28).
- 5 For Teilhard de Chardin, “humanity is the highest form of the evolution of life in the universe” (Northcott 1996: 125).
- 6 There are 46 verses in the Bible that impose great responsibility on the shoulders of humans to take care of the natural environment. For instance, Genesis 2:15 states: “Then the LORD God took the man and put him into the garden of Eden to cultivate it and keep it.”
- 7 For Cobb, the special dignity of humans implies a specific responsibility to God and creatures. God’s message “ruling over others” indicates that human beings must be kind and just rulers who apply his justice and kindness even to the tiniest creature. Without being responsible, and more significantly, without showing kindness to God’s creatures, none can be a ruler in the sight of God.
- 8 For Sittler, the phrases “to rule” the earth and “care for it” clearly indicate that humanity’s rule must be marked by compassion and care, not for showing supremacy over others. Sittler argues that this earth does not belong to humans, it belongs to God, and as humans are God’s creatures and God’s representatives on earth, they must take care of all God’s creatures (Bouma-Prediger and Bakken 2000: 204–205). All creation, in Sittler’s view, is sacrament, which implies that it is humanity’s responsibility to show care for all creatures.
- 9 Aldo Leopold names land as the biotic mechanism and the ecosystem as the biotic pyramid. To clarify the biotic mechanism, he describes the biotic pyramid. In his view, the bottom layer is the soil on which a plant layer rests, an insect layer on the plant layer, a bird and rodent layer on the insect layer, and on up through various animals’ groups until it finally reaches the apex layer which consists of the larger carnivores (Leopold; Schwartz; Finch 1949: 215). The species of each layer are categorized according to their eating habits. Each consecutive layer relies on those below it for survival, and each layer is used for

food by those above (Ibid.). Leopold depicts this pyramid in terms of food chains, not in consideration of the number of species. However, humans are kept at the intermediate level with the animals (like bears and squirrels), eating both vegetables and meat (Ibid.).

- 10 For his philosophy, "Reverence for Life," Albert Schweitzer was awarded with the 1952 Nobel Peace Prize. In *Civilization and Ethics* (1967), Schweitzer states ethics as a reverence for life, including all animals. His philosophy has been a foundation for the growth of the environmental movement in the West.
- 11 Earthism refers to a kind of devotion, almost religiously, to the Earth (Cobb 1999a: 168).
- 12 Economism refers to the reduction of all social factors to economics. No ethical issue is considered in economic growth. Therefore, as an ideology, it is criticized by ethicists and rights movements. For Cobb, economism is so powerful that it has superseded nationalism (Cobb 1999a: 20–25).
- 13 In his philosophical thought of *arcology*, architecture integrating ecology, Soleri attempts to divert human aspirations in a sustainable way. As an architect, he envisions a well-designed city that obliges its inhabitants to share cost-effective infrastructure and services, to use less water, energy, raw materials, and land, to reduce waste and environmental pollution, and to provide spaces for interaction with the surrounding natural environment. Soleri designed Cosanti in a paradisaical valley of Arizona as a unique bio-climate architectural environment in order to prove how a sustainable city can work and provide a high quality of life. His Arcosanti project is an innovative experiment for a more sustainable alternative. Through this project, Soleri shows how humans can live sustainably. For details, see <https://arcosanti.org>
- 14 According to his architectural designs, buildings are built in a way that maximizes solar energy efficiency. All buildings are surrounded by trees for clean, factories are kept away from localities and their wastes are recycled to produce energy – electricity and gas – for the city. Such a well-planned city, as Paolo Solerio designs and Cobb supports, can enable ecological sustainability (Birch and Cobb 1982: 327).

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4 Seyyed Hossein Nasr's Islamic Eco-Religious Views and the Environmental Crisis

Introduction

Nasr presents an alternative religious approach to addressing current environmental problems. This chapter explores Nasr's eco-philosophical view of nature, his understanding of human responsibility for the natural world, and why his spiritual (particularly Islamic) moral guidelines seem relevant to the discussions of environmental issues. This chapter also offers a critical analysis of Nasr's vision of environmental sustainability from a practical perspective.

Why Nasr is Interested in Environmental Issues

In his autobiography (Nasr 2001b: 28–29), Nasr mentions that from childhood on he was fond of the natural beauty of mountains, flowers, trees, animals, streams, lakes, beaches, and the very rocks and soil. He saw a paradisaical beauty in virgin nature. At the same time, he became aware of its gradual degradation. Mevorach (2015: 50–54) notes that during his time at Harvard University, Nasr developed his own concern for environmental issues, especially upon reading Rachel Carson's (1962) *Silent Spring*. He hated how people used science and technology to destroy the natural world. From this profound love, feeling, and concern for the natural world, Nasr started to write on environmental issues from a religious perspective.

Nasr's Quest for the Causes of Environmental Degradation

Nasr connects post-Renaissance modern science and technology to the ecological crisis. For him, the problem of modern science is that it limits itself to a materialistic and rationalistic view of nature and never looks for a reality beyond the visible and physical (Quadir 2013: 5). Modern science has removed sacredness from nature through secularization (Nasr 2017: 2). After desacralizing the natural world, modern humans began to treat nature as a machine.

The worst came in the late seventeenth century during the "scientific revolution." Christianity was weakened by internal and external conflicts, and

metaphysics were considered increasingly valueless (Nasr 1976: 68). After the seventeenth century, spirit and matter, i.e., religion and science, became totally divorced from one another thanks to “secular” science and philosophy. This caused humans to devalue nature as lifeless (Nasr 1976: 70).

Nasr notes that according to conventional scientific understanding, nature is inanimate, lifeless, and spiritless, working just like a machine (1996: 4). For modern scientists, there is no concept of the sacred or the spirituality of nature – such had been removed through the “scientific method” (Nasr 2017: 2). This gave humanity an open license to exploit the natural world in accordance with their own desires, as Nasr argues:

The environmental crisis has come upon the scene to remind man that there is something profoundly wrong with the concept of man and his relationship with nature cultivated since the seventeenth century in the west and based on the forgetfulness of the sacred sciences which view man and the cosmos in one grand harmony.

(Nasr 1993: 79)

Secular science lacks spiritual compassion, allowing humans to ruthlessly abuse nature and natural resources, wrecking the ecological equilibrium. Nasr says:

It is nearly completely the outcome of the indiscriminate use of a technology tied to lust and passion by a civilization which has given (hu)man absolute rights over nature and over himself without making him aware of the responsibility.

(Nasr 1993: 79)

Such irresponsible treatment happens to the natural world when nature is secularized, which means that the hands of God are cut off from the natural world (Nasr and Iqbal 2007: 80), i.e., that God has no business with nature. Therefore humans no longer feel any responsibility toward the natural world, but merely consider it a source of their own material wealth (Ibid.).

For Nasr, the Industrial Revolution that followed the scientific revolution triggered an unprecedented ecological crisis (Nasr and Iqbal 2007: 78). At its outset, this crisis was limited to certain regions (i.e., Western Europe), but over the following centuries, it spread to other parts of the globe, from the West to the East and the North to the South. The late nineteenth century was especially climactic, with technology totally changing traditional agriculture, leading to increased production and mass deforestation. In the twentieth century, genetic and bio-chemical engineering, the wide use of chemical fertilizers and pesticides, and uncontrolled agro-economics began to pose another serious threat to the environment.

Nasr criticizes the very foundation of modern science and technology for undermining ecological sustainability. He argues that “although science is

legitimate in itself, the role and function of science and its application have become illegitimate and even dangerous” (Nasr 1976: 14). In Nasr’s view (2017: 2), the desacralization of nature through philosophical and scientific rationalization was the first assault on the human–nature relationship, followed by the uncontrolled expansion of technology that put the final nail in the coffin.

Nasr’s Criticism of the Scientific Worldview of Nature

Now we turn to Nasr’s criticisms of the modern scientific worldview of nature.¹ Like Cobb, he recognizes that ecological destruction also happened in the pre-industrial period, but it was limited and repairable. At that time humans still had an intimate connection with the natural world that was deeply rooted in their cultural attitudes, religion and spirituality, and cosmology (Nasr 2017: 2). Unfortunately, this traditional approach to the natural world was replaced completely in the seventeenth century by the modern scientific worldview of nature. Though this worldview originated in the European Renaissance (roughly between the fourteenth and seventeenth centuries),² its secular and scientific worldviews came to define “modernity,” being accepted worldwide. As scientific modernity took over in the West, religion began to lose its influence (Nasr 1996: 4). The Christian Church slowly began to accept this new secular and scientific worldview, supporting it to some extent through its own misreading of the creation narratives and endorsing human supremacy (Ibid.). In this way, both ideologies – religious and secular – helped devalue the natural world. Nasr states:

The world of nature is being desecrated and destroyed in an unprecedented manner globally by both those who have secularized the world about them and developed a science and technology capable of destroying nature on an unimaginable scale and by those who still live within a religious universe, even if the mode of destruction of the order of nature by the two groups is both quantitatively and qualitatively different.

(Nasr 1996: 3)

For Nasr, the first blow against nature was taking away its sacredness,³ rendering it mechanistic and rationalistic. Nasr asserts:

The sense of domination over nature and a materialistic conception of nature on the part of modern man are combined, moreover, with a lust and sense of greed which makes an ever greater demand upon the environment.

(Nasr 1976: 18–19)

Humans are very greedy, but this greed was controlled by a sense of connectedness, belief in an afterlife, and their accountability to God. But for

modern humans, science is the only criteria for judgment, making them greedier than a person with faith. Modern humans think only of their own health and wealth in this life, so they exploit nature as if it were a soulless machine.

There are basic differences between “traditional” views of nature and modern scientific understandings of nature. Nasr compares these differences through the analogy of a married woman and a prostitute. For him, traditional ways of understanding nature can be compared to “a married woman from whom a man benefits but also toward whom he is responsible”, while “for modern (hu)man nature has become like a prostitute – to be benefitted from without any sense of obligation and responsibility toward her” (Nasr 1976: 18).

With this destructive scientific, secular, mechanistic, and materialistic outlook, Nasr argues that nature is being dominated and manipulated by purely Earth-oriented humanity (Nasr 1996: 4) completely free from spiritual feeling or regard for the Hereafter. This earthly and exploitative human is a resultant product of the secular humanism that arose from the Renaissance (Nasr 1996: 4).

The Eco-religious Understanding of Traditional Wisdom

Nasr does not use the term “tradition,”⁴ but rather focuses on eternal, guiding principles that are carried through traditions. He states:

by “tradition” we do not mean habit or custom or the automatic transmission of ideas and motifs from one generation to another, but rather a set of principles which have descended from Heaven and which are identified at their origin with a particular manifestation of the Divine along with the application and deployment of these principles of different moments of time and in different conditions for a particular humanity.

(Nasr 2001a: 73)

In another place, Nasr sees tradition “as encompassing principles and truths of a sacred origin along with their unfolding application and manifestation” (Nasr 1996: 24). For Nasr, tradition is not an “outmoded mythology,” rather it “is rooted in the nature of Reality” (Nasr 2001a: 73). Nasr considers tradition “a living continuity” which carries “the science of Ultimate Reality” (Ibid.). Moreover, “it is the call from the Center which alone can allow humans to return from the rim to the Center” (Ibid.). Though Nasr never compares traditions to divine revelation, he does argue that traditions are reflected and manifested through revelation. The value of traditional wisdoms, Nasr argues, is enormous but is ignored by the “profane” or secular sciences, which only deal with a *shadow* of reality. These sciences cannot grasp the absolutely real beyond the relatively real (appearances),

while traditional sciences can go beyond the visible and sensible appearance of reality to perceive the absolutely Real or ultimate Reality. Being enlightened by wisdom traditions (Quadir 2013: 16–17), Nasr bases his works on them, despite his education in modern science.

Nasr argues that traditional worldviews of nature are based on a metaphysical understanding of a deep connection between humans, God, and the natural world. Humans do not own nature; they are just a part of nature and they should thus take care of it. While the modern scientific worldview sees nature as a machine, the traditional worldview sees it as a living body (Nasr 1996: 4; 24, 271; 2017: 8).

Nasr regrettably notes that modern humans are disconnected from their spirituality, treating spiritual attachments as superstitious or backward. Nasr considers such a transformation – from a spiritual to secular outlook – as the suicide of the species (2001a: 4). In many places in his works (1976; 1993; 1996; 2000; 2001a), Nasr labels this as a “spiritual crisis,” from which only the spirituality of traditional religion can save us (Nasr 1996: 7–14, 201–223, 270–2780, 284–288). In Nasr’s view, though world religious traditions are different from one another, they can cooperate in promoting their traditional spiritual conceptions of nature for the good of the planet (1976: 57, 82–85).

Nasr believes that if humans want to save themselves from environmental catastrophe, they must rediscover and repair their broken relationships with God and nature (1993: 84–85, 173; 1976: 14). For this reason, Nasr sees Eastern religious and cultural traditions – Hinduism, Buddhism, Jainism, Shintoism, Confucianism, Daoism, Islam, and Orthodox Christianity – as helpful resources for revitalizing the intimacy between humans and nature (1976: 81–103 [further interpreted by Mary Evelyn Tucker, personal communication on 15 January 2022]). For him, all these religious and spiritual traditions still contain the metaphysical significance of the natural world (Nasr 1976: 73), and can help the Western traditions (Roman Catholicism and Protestantism) rediscover their own intimacy with the natural world (Nasr 2001a: 51). Nasr calls upon Christians to revive the metaphysical traditions they lost, which is something Islam can help with (Mevorach 2015: 122–123) due to their shared Abrahamic roots.

Nasr’s suggestions are deeply rooted in the spiritual and philosophical understanding of the human–nature relationship. Since Nasr wants us to realize our deeper spiritual attachments to the natural environment, he promotes rediscovering the traditional cosmological understanding of nature. Some highlights of his worldview are explained below.

God, Nature, and Humanity, and the Relationship Between Them

Nasr emphasizes the traditional Islamic understanding of God, according to which God (*Allāh*) is the highest Being, incomparable to the created, and is omniscient, omnipresent, and unique (*al-Aḥad*). God contains “both the

impersonal and personal aspects of the Divinity" (Nasr 2008: 35). "God is Reality, which is at once absolute, infinite, and pure goodness and perfection (Ibid.)." God is the owner of all powers and wisdom. God is both immanent and transcendent at the same time. God is the creator and sustainer of the universe. God is the source of the environment because everything is surrounded by God.

Nasr strongly supports the Islamic view of nature, according to which the whole universe is the creation of God, rather than the result of any accidental cause. God's creation is purposeful and meaningful (Quran, 3: 191). The natural world is a perfect Muslim because it glorifies God and obeys God's commands (Nasr 1996: 286). In a metaphorical sense, all creation is considered the family (*ayyāl*) of God (*Mishkat al-Masabīh*, ḥadīth no. 3: 1392). As a sign (*āyah*) of God, nature manifests God's wisdom and power, a revelation (*wahy*) that guides us to God (Nasr 2008: 46). The beauty of nature and its complexity proves God's existence. Those natural laws frequently appealed to by secular philosophers and scientists are the very rules God set for creation. Every component of the natural world has its own intrinsic value, *and* instrumental value vis-à-vis the others, because God meant every part of the ecological system to be interacting, interrelating, and inter-depending.

Referring to the Quranic term *khalīfah* (vicegerent) (Quran, 2: 30), Nasr supports a hierarchy of creation with humanity at the top. As the vicegerents of God, humans are to rule the Earth in a just way, allowing all life to thrive. Since humans did not create the natural world, they have no right to destroy it, though they can and should take what they need from it to survive. Being a part of the natural world, humans should be helpful co-partners with creation (Nasr 2006: 307). Whenever Nasr talks about humanity's high status, he connects it with the Qur'anic term '*abdullah*' (servant of God) and *amanah* (trusteeship) (Nasr and BAS 2015: 14–15; Nasr and Iqbal 2007: 95). Though magnified through *khalīfah*, humans are not free from a profound sense of responsibility endorsed by '*abd*' and *amanah*. Human special dignity carries an imposed responsibility that comes from absolute authority (God).

Nasr connects God with nature and humanity in a deep, collaborative relationship, wherein God is seen as the creator of nature and humans as God's vicegerents and servants on earth (Ibid.). Without a strong relationship with God, the source of all connections, humans cannot thus maintain a proper relationship with nature. All creation is the manifestation of God's commandments, and God's command, to which human beings must respond. Again, since the cosmos are a result of God's holy will, it is sacred and has a direct connection to God (Nasr 1993: 130–135; Nasr and Iqbal 2007: 96). God himself is The Environment (*Al-muḥīt*, which is one of God's beautiful names) (Quran, 4: 126; 11: 115). Through this metaphysical discussion, Nasr shows the deep connection between God, nature, and humanity, out of which arises his eco-religious vision.

Sacred Science

The term “sacred science” is the English translation of the Latin *scientia sacra*. Nasr connects this term with metaphysical knowledge and its application to the natural world. In Nasr’s view, metaphysics deals with the Divine Principles which are the basic sources of knowledge. For Nasr, this knowledge is “at the very center of (hu)man’s being as well as at the heart of all orthodox and authentic religions” (Nasr 1996: 1–2). In Nasr’s view, this is not “mundane” knowledge but supreme knowledge, attainable only by a true intellect through deep spiritual contemplation (Nasr 1993: 1–2). This knowledge comes from the ultimate Reality or the supreme Unity which is itself sacred (Nasr 1993: 2), so this sacred science is “the science of the Real” (1993: 173). In other words, it is wisdom that implies supreme knowledge about reality. For Nasr, the metaphysical ground of sacred science is God and the world of the spirit (1993: 7). Sacred science never separates nature from humanity, but modern science is purely based on human rationality and has no relation to spirituality. Modern scientists do not talk about the sacred character of nature and a non-visible spirituality behind its appearances.

To address our present ecological crisis, Nasr says we must revitalize sacred science (1993: 71, 96–99, 129–45). Only then is it possible to re-discover and reconnect with the sacredness of nature, and only then will we be motivated to prioritize environmental protection. Importantly, Nasr also distinguishes sacred science from traditional sciences, occultism, and other forms of superstitious knowledge.

Traditional Sciences

For Nasr, “traditional” sciences are not purely based on metaphysical principles in the way sacred science is, but nor are they as divorced from these principles as the modern sciences are. These were the primary modes of thought that dominated human civilization before the seventeenth century (1993: 95–96). Nasr distinguishes these traditional sciences from social, juridical, and theological knowledge (Nasr 1993: 95–96). In some ways, these sciences can be compared with occultism because of their deep esotericism and connection to the supernatural, but they should not be pejoratively called “superstitious” (Nasr 1993: 96). For Nasr, these sciences were cultivated by great sages but this did not result in cult worship. But the traditional sciences are not fully sacred sciences, because they are based on human speculation. Nasr makes it clear that what Pliny (23–79 CE), Strabo (63 BCE to 23 CE), Brahmagupta (590–668 CE), and al-Biruni (973–1052 CE) conceive, cannot be considered the sacred science (1993: 96).

However, there are basic differences between traditional science and modern science. In traditional sciences, the profane is marginalized and the sacred is central, but in modern science the profane is central and the sacred is powerless (Nasr 1993: 96–97). Furthermore, Nasr says:

The traditional sciences are essentially sacred and accidentally profane, and modern science essentially profane and only accidentally aware of the sacred quality of the universe and, even in such rare instances, unable to accept the sacred as the sacred. Modern science shares fully the characteristic of modern (hu)man as a creature who has lost the sense of the sacred.

(Nasr 1993: 97)

In traditional science, the physical world is seen as the lowest domain of reality while the spiritual world is seen as the highest domain of reality, but in profane science, the physical world is seen as the highest domain of reality while there is no value for the spiritual world. Traditional sciences are aware of the Divine origin of the world while modern science does not believe in the divine origin, but rather talks about its materialistic origin (i.e., the Big Bang). Traditional doctrines talk about the paradisaal perfection of human beings with the help of God but modern science talks about the evolution of the human species. In traditional sciences, a human is seen as the totality of body, mind, soul, and spirit, so it includes their physical, mental, and spiritual needs. In modern science, only a human's physical body is considered, so it only highlights our physical needs (Nasr 1996: 97–98).

By showing certain distinctions between the traditional sciences and profane sciences, Nasr argues that the traditional scientific understandings are more relevant to addressing the present ecological crisis, for they promote a participatory view and a deeper understanding of the human–nature relationship.

Spiritual Feeling for Nature and the Environment

For Nasr, “the environmental crisis is an externalization of the darkness of the soul of modern (hu)man and the resulting eclipse of (hu)man's intuitive and spiritual faculties, along with the loss of the symbolist spirit” (2017: 9). In his view, modern humans have forgotten that they are part and parcel of nature, just a microcosmic part of the macrocosmic universe. In modern education, social systems, and geopolitics, there is no talk about the value of spirituality. Spirituality is considered a matter of superstition in our modern worldview, keeping humans distanced from their spiritual feelings. As a result, there is an emptiness in the human mind where spiritual feeling ought to be. Nasr strongly argues that humans consist of both a material body and a spiritual mind. Their bodily functions deal with worldly affairs while their mind deals with emotion and spirituality, wherein there is a romantic longing for something beyond the visible world.

In Nasr's view, a human being is never complete with the spiritual feelings that ground their very existence and role in creation. Humans cannot be fully at peace, even with unlimited prosperity and power, if their spiritual mind is not free from mental disorder. Modern humans want to be

happy through material wealth, but they have no peace at heart because they cannot realize that such happiness is relative, not absolute. Peace of mind and heart cannot be achieved until human beings are at peace with nature (Nasr 1976: 14, 136). Real peace lies in a harmonious relationship between Earth and the heavens (1976: 14), in which those on Earth establish a deeper connection with those in Heaven in accordance with the divine commandments of the Supreme Being.

As Nasr understands it, the present ecological crisis is a spiritual crisis, and he proposes a revolution in human thought regarding the natural world. He says, “to overcome the present environmental crisis we must rediscover these lost elements and faculties within our souls” (Nasr 2017: 9). A renewed spiritual connection with nature would bring about substantial, positive change to human behavior individually, socially, and globally.

For Nasr, modern humans talk a lot about the ecological crisis, but they do not “walk the walk,” as they say (1976: 13). Nasr sees this as a dilemma (Ibid.) created by a lack of spiritual feeling for the environment. Until this changes, the ecological crisis continues.

Religious Spirituality

For Nasr, as religion promotes a spiritual feeling for the environment, modern humans should return to it. In Nasr’s view, every authentic religious tradition imposes some obligations on its followers for spiritual ecological contemplation. Scriptural references to the natural world cannot be understood without a deeper spiritual point-of-view. Without spirituality, religion cannot work, and without religious spirituality, there is no spirituality. If humans are to address the ecological crisis in a more effective way, then religious spiritual feelings for nature must be encouraged (Nasr 1996: 9–24; 2000: 18–20)

In Nasr’s view, a bond between sacred and profane, between spirit and nature, and the Creator and the created, can only be possible through religious spirituality – a spirituality that talks about the ultimate unity of all things. Also, a religion’s very basic spiritual teachings can motivate humans to consider other religions’ spiritualities, which can ground a cooperative approach (Nasr 1996: 24). If humans could just consider their own creation, from their unique structure to their biological processes, they could more easily understand that they are part of nature and nature is part of them, that there is an inseparable and inevitable relationship between humans and all other life.

Religious Worldviews of Nature

Nasr (2000: 18) notes that modern humans have abandoned a fundamental principle of the religious worldview,⁵ found in ancient China as the *Tao*, in Hinduism with *rita*, in Buddhism with *dharma*, in ancient Greece with

nomos, and in Islam with *shariah*. This same religious fundamental principle is called different things in different religious traditions, but it pertains to the same reality, i.e., the order or the law according to which all things are governed (Ibid.). In Nasr's view, this religious fundamental principle is the core of cosmology. This common religious worldview implies a deeper relationship between humans and the natural world, as we (should) follow this same law. Nasr asks human beings to accept this traditional religious view of nature when he states:

We must realize that the traditional religious wisdom applies to us as much as it did to our remote ancestors, and that humanity must be seen, as it once was, as an inseparable part of the natural world, as God's creation and subject to the same divinely ordained laws that must be observed if we are to maintain its fundamental order.

(Nasr 2000: 20)

In identifying the common essence of world religions, Nasr argues that religious views are united in favor of ecology. In a religious understanding, nature is not seen as alien to humans as the modern scientific worldview imagines, but rather it is viewed as a living organism of which we are a part. If we can see that, then we would reject modern science's mechanistic understanding of life.

Challenging and Changing the Modern Scientific Worldview of Nature

To better explain our ecological crisis, Nasr compares present environmental problems with a cancer patient (Nasr and Iqbal 2007: 81; Nasr 2003: 86). In his view, it is not possible to heal a patient by pouring powder on their face, so how can we save the environment with mere cosmetic changes? Nasr notes: "That is why simple cosmetics and good engineering will not in themselves solve the environmental crisis" (Nasr and Iqbal 2007: 91). For Nasr, until a revolutionary transformation in our understanding of our relationship with nature occurs, there can be no significant improvement in environmental sustainability. Nasr argues that by challenging the present scientific worldview of nature, a deeper transformation of our current perceptions can proceed, leading to real actions.

Nasr refers to a story in the Quran: One day a wise man came upon a boat. He unplugged a hole in the boat so it could not be taken away by a tyrant king (Nasr and Iqbal 2007: 82). This might seem illogical, but by sabotaging the boat he made it so that a poor man could raise it, fix it, and use it later. The wise man sank the boat but did not destroy it, instead *preserving* it for someone who deserved it more. Through this allegory, Nasr makes clear that drastic, even counterintuitive actions are needed to preserve the environment.

Nasr also appreciates practical steps. For example, he notes energy conversion from gasoline, diesel fuel, liquefied petroleum gas (LPG), etc., into compressed natural gas (CNG) to be less harmful than dirty energy (natural coal and oil), agreeing that through such measures the quality of air can be improved. But he stresses that we also need more effective long-term policies. Though such immediate steps based on technological or economic policies can bring temporary solutions, these are not permanent solutions, and we need a change in our present scientific worldview of nature. Nasr says: "So I am in favor of all immediate solutions on a technological or economic level, but I do not believe, that is going to solve the crisis if we insist on pursuing our present courses" (Ibid.). In another place, Nasr echoes the same sentiment:

There are technologies which can reduce pollution, but I do not believe that those technologies alone will save us from this crisis. We have to have an inner transformation. We have to have another way of looking at ourselves, at what the purpose of human life is, at what satisfies us, what makes us happy, and not turn over to consumption as the only way to be happy, seeking satiation of our never-ending thirst and satisfaction of endless wants that are then turned into needs.

(Nasr and Iqbal 2007: 84)

For Nasr, the permanent solution for the ecological crisis lies in a revolutionary reformation of our present mechanistic-materialistic perceptions of the natural world. This movement, as Nasr insists, is essential for ecological sustainability, which must come through a spiritual and participatory worldview of nature (Nasr 1992: 106). Such reformation is not possible until modern humans are better informed about the importance of ecological equilibrium for their existence. They should learn how to give priority to a holistic view of nature over a reductionist view centered on human life and comfort. These realizations come from "the religious-spiritual knowledge of nature" (Beringer 2006: 40), which are essential for transforming the present secular views of nature into spiritual views of nature.

Nasr considers the modern scientific worldview of nature to be a serious tragedy for ecology (Quadir 2013: 47) because this worldview makes humans "the measure of all things."⁶ This secular, humanist, and anthropocentric view places humans, not God, at the center of all things. God is replaced by humanity, and nature is considered humanity's servant. Such an attitude is clearly found in the utilization of technology and scientific experimentation without consideration for the natural world. Nasr calls technology a murderer of nature when used indiscriminately. As a consequence of our irresponsible use of technology, plants and animals are dying, water, air, and soil are being polluted, global warming is increasing, and the ozone layer is being depleted, all of which have contributed to the problem of climate change. This is due to our modern scientific and social

worldview, which is consumeristic and selfishly considers only the earthy welfare of humans at the expense of the rest of creation.

Religious Understandings of the Cosmos/Sacred Cosmology

Nasr emphasizes understanding the earth and cosmos (Heaven) from a traditional metaphysical, especially cosmological, perspective (Beringer 2006: 33). For Nasr, the study of the order of nature in different religions shows the infinite richness of the Divine Nature (Nasr 1996: 24). Nasr states: "All religions relate the order of nature to the order within human beings and envisage both orders as bearing the imprint of the Divine Reality, which is the Origin of both (hu)man and nature" (Ibid.). He argues that knowledge of the whole universe does not lie in science but rather in metaphysics (Nasr 1997: 25), which is enriched by the divine knowledge of all authentic religious traditions of the world (Nasr 1996: 24). Nasr suggests accepting various forms of knowledge and understanding them within their boundaries (Ibid.). But this is not possible in the modern empirical sciences, for they have closed the door on different options.

Nasr criticizes the modern scientists who distance cosmology⁷ from its original meaning that articulates phenomenal reality with the underlying metaphysics (Beringer 2006: 31). For Nasr, cosmology is a science that deals with all orders of natural reality (Nasr 1997: 22). It connects revelation and metaphysical doctrines in its scientific analysis of the order of nature and all other physical realities. Nasr calls it sacred cosmology,⁸ according to which it is believed that the physical world originates from the spiritual world and is sustained by the spiritual world (Nasr 1997: 22). The physical world cannot exist independently of the spiritual world. The spiritual world is associated with the single Divine Reality though "it is in itself unknowable" (Ibid.).

For Nasr, in the view of sacred cosmology, humans are seen at an intermediate level between the physical world and the spiritual world, which implies that one important objective of human life is upholding the cosmic order in their understanding and feelings (Ibid.). Human souls are nothing but the vessels of the Divine (Ibid.). For Nasr, a real cosmology cannot deal with the material and corporeal stages of existence without reference to revelation. When secular scientists removed revelation from cosmology, it lost its sacred character and granted humans an open license to exploit nature. To reverse this, Nasr calls attention to the religious understanding of cosmology instead of the secular scientific understanding.

Perennial Philosophical Thought

Nasr criticizes materialistic and secular philosophy for ignoring the spiritual ground of the world. In his view, this kind of philosophy is responsible for growing a spiritless worldview that inspired humans to treat nature as an

inorganic body. To challenge this destructive philosophical attitude, Nasr (1996; 1997) turns to perennial philosophy.⁹ For Nasr, perennial philosophy deals with both spiritual and material grounds in a balanced way by ensuring a connection between them. Usually, perennial philosophy addresses the spiritual foundation of things, souls, world, and the universe. Nasr hopes that a perennial philosophical understanding can grow a deeper awareness of the spiritual connections that may motivate humans to behave more responsibly toward the natural world. Johnston summarizes Nasr's perennial understanding as thus:

For Nasr, any truth found in the religions of the world is derived from the same Absolute Source, whether the Heaven of Taoism, nirguna Brahman of Hinduism, the "primordial monotheism" of the indigenous peoples, the metaphysics of the alchemists or Western hermeticists, or the Creator God of the Abrahamic faiths. None of these traditions lost the sacred link between humanity and nature. Each religious tradition is, in a sense, its own "religious universe". At the same time, each tradition has its own interpretation and ritual working out of the Absolute Source, like a cosmic spring from which seers and particulars of all faiths continually draw. (2012: 222)

The source of perennial philosophy is intellect, and it deals with cosmology and ontology. The whole creation (cosmos) is seen in perennial philosophy from a sacred perspective in connection to God, which was lost with the advent of the "Western Renaissance thinking" (Johnston 2012: 222), as Nasr states:

The gradual de-sacralization of the cosmos which took place in the West and especially the rationalism and humanism of the Renaissance which made possible the Scientific Revolution and the creation of a science whose function, according to Francis Bacon, one of its leading proponents, was to gain power over nature, dominate her and force to reveal her secrets not for the glory of God but for the sake of gaining worldly power and wealth.

(Nasr 1990: 96)

As Nasr believes, the present environmental crisis is a result of the disconnection of modern humans from their primordial identity, and he focuses on the retrieval of this forgotten wisdom through the spiritual and religious traditions of the world: "a nexus must be created in this realm among the traditions, as has been carried out by the traditional proponents of the perennial philosophy for understanding of the Divine Principle and its numerous manifestation in various religious universes" (Nasr 1996: 7).

Nasr is not the only Muslim scholar to talk about the importance of perennial philosophy in understanding reality. There are many other Muslim

philosophers and theologians who have written about it over the centuries. In Islam, especially in Arabic works, perennial philosophy is considered equivalent to *al-hikmah al-khalidah* (eternal wisdom). In his essay (2009: 39–92), Markwith shows how the Prophet Muhammad (571–632) and some Muslim mystics – for instance, Ibn Arabi (1165–1240), Suhrawardi (1154–1191), Mulla Sadra (1571/2–1640), Jalal Uddin Rumi (1207–1273), and Mahmud Shabistari (1288–1340) – understood the transcendent unity of beings (*Wahdat al-Wujūd*), the all-pervasive reality and truth. In twentieth century, Muslim scholars like René Guénon (‘Abd al-Wāhid Yaḥyá) (1886–1951), Frithjof Schuon (‘Īsā Nūr ad-Dīn ‘Aḥmad) (1907–1998), Titus Burckhardt (Ibrahim Izz al-Din) (1908–1984), and Martin Lings (Abū Bakr Sirāj ad-Dīn) (1909–2005), among others, worked on perennial philosophy, and Nasr was directly influenced by their writings.

According to Muslim perennial philosophers, gnostics or metaphysicists (*ma’rifa*) created the foundation for the perennial philosophical understanding. Like other perennial philosophers, Muslim perennial scholars also believe that every religion comes from the same source despite their differences. They concentrate on this primordial wisdom in persuading humans to build a triangular relationship between God, humanity, and the rest of creation. Considering this, a perennial understanding should be treated as an esoteric form of ecumenism not only for religions but also for all creatures. Sometimes Muslim perennial philosophers are misidentified as pantheists by conservative Muslim sects like the Wahabis¹⁰ due to their ignorance of the Islamic esoteric traditions. A better knowledge of Islamic mysticism, its sources, historical origin, and development could rectify this.

Pontifical Humans, not Promethean Humans

Nasr presents the concept of “pontifical humanity” in opposition to “modern humanity.” With the term “pontifical man,” Nasr describes a traditional, spiritual, and religious human being (Nasr 1993: 134–135; 1996: 160–161). The most important quality of a pontifical human, in Nasr’s view, is that they are a bridge between Heaven and Earth. For Nasr, a pontifical human is submissive to Heaven and careful toward the natural environment (Mevorach 2015: 144). A pontifical human can play his role as a vicegerent or representative of God on earth, or a *khalifat-ullāh fīl-arḍ* in Islam. Nasr clarifies that a human should rule as a caretaker, by virtue of their servanthood to God (‘*abd-ullāh*). If one only sees themselves as a viceregent (*khalifat-ullāh*) without this notion of servanthood (‘*abd-ullāh*), one become arrogant and destructive (Nasr 1993: 134–135). Rather human power and humility are brought in balance through both terms, *khalifat-ullāh* and ‘*abd-ullāh* – the vicegerent of Allah and His servant (Ibid.).

Nasr describes modern humanity as “promethean,” insofar as we deny the existence of God and are concerned with earthly life and works. Promethean humans think selfishly, concerned only for their own immediate well-being.

They criticize religious understandings as “superstition.” Nasr blames modern scientific philosophy for creating this kind of human.

Not Anthropocentric but Anthropocosmic and Theo-anthropocosmic

Referring to the Chinese traditional belief in the harmonious relationship between Heaven and Earth, Nasr (2013: 10–14) argues that traditional wisdom, be it in China or anywhere else, has never supported a human-centric approach, but rather advocated an anthropocosmic approach to nature. Similarly, in reference to Philip Sherrard’s narratives, Nasr (1996: 202) agrees that Christianity was originally theo-anthropocentric, but not anymore. Nasr points out that both anthropocosmic and theo-anthropocosmic approaches involve a deeper relationship between Heaven and Earth, i.e., between God and creation. In both approaches, human beings are still important, but not dominant, everything being valued according to their cosmic role. Mevorach (2015: 146) notes that, according to Nasr, traditional human beings used to maintain such anthropocosmic views in their everyday life, with greater harmony with nature, but modern humans are anthropocentric because they concentrate only on the material benefits.

Nasr states that an anthropocosmic human realizes “the world of nature as symbol of the divine rather than secular facts” (Ibid.), while an anthropocentric human sees the world of nature like a machine. For Nasr, all traditional religions, despite differences in their views of nature, are better understood as anthropocosmic (or theo-anthropocosmic) rather than anthropocentric because of their perception of heaven (Ibid.). In contrast, it is modern science and secular philosophy that is anthropocentric.

The God–Human–Earth Hierarchy

In Nasr’s view, the God–Human–Earth hierarchical relationship is commonly seen in all religious and cultural traditions, though with some subtle differences among them. Nasr generalizes this relationship “as a more or less universal or perennial aspect of all traditional philosophies and religions” (Mevorach 2015: 146). But secular environmentalists consider this hierarchical relationship to be a very dangerous thing for environmental ethics, arguing that if humans are kept at the center, all other creatures are considered only instrumentally for human benefit. Nasr responds to their criticism by arguing that this hierarchical relationship does not give humans license to mistreat the environment because this relationship does not allow us to ignore the rights and intrinsic value of other creatures. In fact, humans are responsible for nature and accountable to God. Because of their intermediary position, they are bound to play this protective role as God’s custodians on earth.

For Nasr, the God–Human–Earth model implies responsibility, not domination. For him, it is the modern scientific worldview that has distanced God

from humanity, and thus distanced humanity from nature, making humans the center. With God marginalized, humans are no longer accountable for their actions and thus focus on their own short-term wellbeing instead of the natural world. This is anthropocentrism, which stands in contrast to the triangular relationship seen in traditional religious cosmologies. Therefore, the God–Human–Earth relationship model should certainly not be conflated with anthropocentrism by secular environmentalists; in fact, it is quite the opposite.

Nature as a Reflection of the Divine

For religious or spiritual people, nature reflects the divine being whom they worship, but for modern science, nature is but a material reality that cannot point beyond itself. Secular scientists see nature with their physical eyes, while spiritual persons see it through their *spiritual* eyes. There is thus a clear demarcation between these two groups of people in terms of seeing, observing, and pondering the natural world. The spiritual person sees God in nature, and thereby God is also seen in humankind. As the Quran says: “Verily! In the creation of the heavens and the earth, and in the alternation of night and day, there are indeed signs for men of understanding” (3: 190).

Nasr argues (1996: 9) that if nature is understood as a reflection of the divine reality, we cannot help but venerate nature, even its non-biotic substances. *All* the components of nature are created by God, so as responsible creatures from the same God, humans should be very careful in their use of the natural world’s resources. To disrespect and abuse them, means to disrespect and abuse the Maker who created them. Human love for God implies love for God’s creation. A man who truly believes in God cannot bear to destroy that which has the divine reflection.

Nature as Consciousness and a State of Being

Referring to Hinduism and the Abrahamic religious traditions, Nasr argues that nature is not in a state of unconsciousness, but rather is in a state of consciousness and being. Nasr contends that at the beginning of creation there was the Word of God, which was not a mere abstraction but was conscious and living, manifesting itself through creation. A thing of supreme command cannot be otherwise than having consciousness and being. (Nasr 2017: 9)

Transcendent Unity of Being

All things are created by the same creator, so everything is related to everything else. If humans could remember this, they could remember their attachment with nature. There is an urgent need for humans to see themselves as part of a transcendent unity of Being with God and the rest of

creation. This can motivate greater compassion toward non-human animals. This sort of a deeper spiritual contemplation, Nasr argues, is essential for restoring the human–nature relationship, without which no initiative for environmental sustainability is feasible (1976: 20, 135–136).

Spiritual Worldview of Nature

Against the modern mechanistic worldview of nature, which brings harm to nature, Nasr advocates a spiritual worldview of nature (Beringer 2006: 37). The modern worldview lacks a spiritual feeling for non-human animals, having removed spirituality from its scientific discourse. Nasr clarifies this through the example of modern humans. Modern people can talk about the environmental crisis, understanding that there *is* a crisis but lack a spiritual connection to it (Nasr 1976: 13). They do not truly *love* nature in a way that makes them capable of protecting it. If a spiritual worldview of nature was developed and adopted, environmental degradation could be reversed. Nasr says, “The solution of the environmental crisis can come about only when the modern spiritual malaise is cured and there is a rediscovery of the world of the Spirit” (Nasr 1992: 106).

Traditional Agricultural Systems

Nasr criticizes modern agriculture as well, as it relies too much on technological and chemical methods (e.g., fertilizers). The way modern agricultural systems grow crops – using pesticides, herbicides, and chemical fertilizers – is highly disruptive and destructive, altering the soil and killing helpful wildlife like worms and insects (Nasr and Iqbal 2007: 88). These chemical ingredients also gradually enter human bodies through consumption, leading to diseases like cancer. While increasing overall production, in long run such methods are seriously detrimental to our health and the environment (Ibid.).

Traditional Ways of Construction

Though traditional methods were not completely free from environmental damage, their effects are much less than what we have today. The construction industry is no exception. Well-versed in architecture, Nasr notes that it is still possible to erect buildings by using traditional methods (Nasr and Iqbal 2007: 90–91). For example, he appreciates the designs of Hassan Fathy (1900–1989 CE), an Egyptian architect who uses traditional methods. Fathy favors using mud, bricks, stone, and other traditional materials instead of metals like iron, steel, and aluminum, showing that it is still possible to build homes and other buildings in accordance with environmental sustainability (Ibid.). The Great Wall of China, the Pyramids of Egypt, and Kutub Miner of Delhi are major examples of great works constructed through traditional means.

Toward Less Consumption

Humans should weigh the benefits and risks of their consumption habits, not just for their own health but also for the environment. What are the consequences of what we eat? Nasr calls for a balanced philosophy and ethic of consumption in consideration of harmony with nature. For Nasr, it is very unfair to think that we, human beings, are entitled to consume so much simply because it is readily available.

Controlling Human Greed

Despite our awareness of the present ecological crisis, modern humans continue abusing nature, a paradoxical state of being (1976: 13). This paradox is a result of human greed (Nasr 1997: 23). Humans should control their greed, yet they are enslaved to it. Modern science and economics have created a consumerism that triggers such greed in the human mind (Nasr and Iqbal 2007: 83). Everything in our world is measured by economic prosperity, turning human beings into selfish animals. Our market-based economic system creates artificial wants, motivating human beings to fulfill unnecessary desires. Until human greed is controlled, there can be no environmental sustainability.

Wise Economics

Environmental problems have a logical relationship with modern economics, whereby the natural world is abused for material benefit. This was not the case before the seventeenth century when our economics had a more positive relationship with nature through religion. But since then the secular spirit has governed all human affairs. Secular economic theories and policies think only of earthly benefits, and therefore lack consideration for ecological equilibrium. For this reason, Nasr encourages economics that accounts for ecological sustainability in production, distribution, marketing, and consumption. Nasr does not believe that more enlightened economists can save the environment (Nasr and Iqbal 2007: 79), but they could mitigate the harm.

A Society of Human Beings with Profound Responsibility for Nature

Nasr re-emphasizes human responsibility for the planet. First, he advocates cultivating a deeper spiritual feeling for the natural world, in conjunction with major changes in our behavior. If humans can realize that they have a profound responsibility to the natural world, it can motivate them to reform on their own. Without such a radical transformation in human attitudes and behavior, our present crisis cannot be reversed. Such requires all

to embrace a profound sense of social and ecological responsibility. This reformed society is possible only through restored accountability to God and intimacy with the rest of creation, as well as a realistic vision for economic sustainability. Nasr's hypothetical society articulates a sacrificial mentality for all and compassion toward nature (Nasr 2000: 20).

Interreligious Dialog for Environmental Sustainability

In Nasr's view, every traditional religion has treasured resources for dealing with the ecological crisis (Nasr 1996: 24, 191–237). Despite some different views on nature, religious and spiritual traditions generally focus on how to build an intimate relationship between humans and the natural world (Ibid.). Nasr believes that if there was a continuous dialog among religions on present ecological issues, they would enrich their own positions and act accordingly (Nasr 1996: 220). In his view, the western religious traditions, especially Christianity, have lost their worldview of nature because of their embrace of secularism, humanism, and scientism (Nasr 1996: 192). Nasr suggests reversing this trend and re-attaining a spiritual worldview of nature. He believes Eastern religious traditions, including and especially Islam, can help Western Christianity restore its vision of the natural world.

For Nasr, a Christian–Muslim dialog can be productive thanks to their shared historical roots (Nasr 1976: 57). Another commonality is their shared understanding of Revelation. Nasr advocates for Christian–Muslim dialog for the purpose of environmental sustainability, and at the same time, he also encourages dialogs among other religious and cultural traditions on the same issue (Nasr 1976: 93, 106). Without the dialog, understanding, and practical collaboration of the world's religious and spiritual traditions, it is not possible to create a common human commitment to love and respect the natural world.

Insufficiency of Environmental Ethics

For Nasr, the present ecological crisis is a vast issue and a deeply rooted philosophical and ethical problem that cannot be solved by mainstream environmental ethics. Environmental ethics, as Nasr sees it, is itself too weak to deal with the ecological crisis (Nasr 1996: 273). Nasr argues that our conventional environmental ethics is developed from Western moral philosophy (Nasr 1996: 271–272), which is deficient due to its disinterest in religious perspectives. It thus lacks the metaphysical understanding to consider the deeply rooted relationship between humans and nature.

Moral philosophers have certainly engaged in environmental ethics, but their thought lacks the spirituality that comes from a religion's metaphysical grasp of things. According to environmental ethicists, humans are *not* obligated to deal with the environment, but rather it is a moral choice that they must make on their own. In religions, it is not only a moral duty based on human choice but also a Divine command.

Humans are not only rational animals but also responsible ones. In principle, human responsibility has a bearing on our rationality. This responsibility comes primarily from religious or spiritual feelings, not from our rationality, therefore religions are equipped to compel positive attitudes and behavior with respect to the environment. Environmental ethics, on the other hand, removes God's command from the matter, leaving only our rational choice – this is insufficient. Environmental ethics convinces too few people to make the moral choice to protect the environment, simply because it cannot cultivate the deeper awareness needed to understand our obligation as caretakers. For Nasr, even if environmental ethics is blended with religious ethics, still then it “cannot cohabit with a view of the order of nature that radically denies the very premises of religion and that claims for itself a monopoly of knowledge of the order of nature” (Nasr 1996: 273). In Nasr's view, environmental ethics is simply not enough to deal with our present challenges.

Reinterpreting the Theology of Nature

Nasr suggests revitalizing the religious understanding of nature with new interpretations related to the ecological crisis (Nasr 2000: 20). As ecological issues were not a serious problem for ancient peoples, they did not need to really think about the issue from their respective religious and spiritual traditions. The modern world faces fatal environmental degradation because of irresponsible human actions, so religious institutes and religious scholars should think deeply and critically about ecological sustainability, utilizing the resources of their faith and spiritual traditions. To perform this scholarly task, religious institutes and programs should include ecology in order to familiarize future scholars with the problem from their own respective spiritual points of view.

Pseudo-Philosophy and Pseudo-Metaphysics

Nasr is skeptical of integrating philosophy and science into religious worldviews of nature. According to Nasr, authentic religious worldviews are part of sacred science, and there is no need to integrate modern science into them. Rather, it is modern science that should be reformed in light of sacred science. To integrate religions with modern science means compromising the foundations of those religions. In Nasr's view, it is not possible to combine the sacred and the profane. The religious sciences deal with the spiritual contemplation of absolute reality, while secular science deals with the appearance of reality, not with reality itself.

Nasr is strongly against syncretizing modern science with religion and states that such initiatives are false attempts to belittle and devalue religions and the Eternal Truth that they have represented from time immemorial. For this reason, Nasr criticizes the initiative of Teilhard de Chardin (1881–1955 CE) as an example of “pseudo-metaphysics” (Nasr 1976: 127).

Nasr suggests certain conditions for modern science: It should not have a monopoly on knowledge, but rather should be open to alternative epistemologies, including esoteric or non-empirical sources. While busying itself with empiricism, it should not ignore what religious traditions have to say. As modern science cannot truly grasp metaphysics, it should leave this to religious philosophers. Modern science should be used as an analytical tool for explaining the visible things and invite religions to interpret the cosmological and ontological relationships of these things. If modern science does not interfere in religious matters, then the two disciplines can work together. Such arguments imply that the modern sciences should compromise with religious truths, allowing themselves to be guided by religions' strong moral foundations. As religious truths come from a divine source, these cannot be measured by modern science. Modern science has no capacity to evaluate the truth of ultimate reality.

Practical Suggestions for Muslims Regarding Environmental Sustainability

The environmental crisis is not limited to specific regions; it has become a global issue, affecting every corner of the world. Muslim countries are no exception, as they also contribute to environmental degradation alongside their Western counterparts, the Muslim states blindly following in the formers' footsteps. Unfortunately, their governments, political parties, Muslim scholars (*ulama*), NGOs, and grassroots Muslims are not taking the problem seriously – this is despite their rich cultural and religious resources for environmentalism. Having considered this problem, Nasr calls upon Muslims to address environmental issues through some Islamic moral and spiritual guidelines.

Environmental Resources in Islamic Heritage and Scholarship

Nasr reminds Muslims that in Islam the entire cosmos is a witness to God, and the Quran recognizes how beautifully the various entities of the cosmos glorify Him (Quran, 59: 24; 55: 6). With some quotations from the Quran and the Prophetic traditions, Nasr shows that everything in the cosmos follows the command of God, worships God, and praises God. Nothing is created by God without a good purpose (Quran, 3: 191). Referring to Islamic religious texts – the Quran and the Hadiths – Nasr shows that nature should not be viewed as alien to Muslims, but rather they should recognize that humans are part and parcel of nature. In Nasr's view, nature works as a cosmic guidebook for humankind – a wide array of God's wisdom, power, and revelation (Nasr and Iqbal 2007: 86). Apart from the Quran and Hadiths, there are a huge number of Quranic commentaries, prophetic traditions, and mystic poetry (in every language of Muslim world) that can motivate Muslims to be more conscious about ecological equilibrium (Nasr 2017: 10–11).

Islam as the Cosmic Reality

As the divine system of God, Islam is a cosmic reality, for it articulates the whole universe, and all creatures participate in it (Nasr and BAS 2015: 14). Islam comes from God, so practitioners of Islam cannot show any negligence for God's creation. All God's prophets were guides, their prime duty connecting humanity to God and calling upon us to be humble toward what God has created. The prophetic mission was based on the cosmic reality and all messengers reflected it. Those who follow any prophet of God must accept this cosmic reality. As the followers of Prophet Muhammad, Muslims should promote the Islamic beliefs about reality in order to help maintain an ecologically friendly relationship with God's creatures.

Islam as a Religion of Nature

Nasr (1996: 22) considers Islam "a religion of nature," *din al-fitrah*, for Islam deals with the same laws by which the natural world is governed. Islam disallows breaking up this primordial relationship; rather, it insists on strengthening it. Muslim mystics argue that there is an intimate relationship between humans and all other creatures. Referring to some Quranic verses and prophetic traditions, Nasr states that all existence is the manifestation of the commands of God, and everything's presence implies the Great Existence.

Every biotic and abiotic organism of nature follows what God has fixed for them. If every substance of nature is believed to do the same in terms of following the law of nature, then there is no real difference between humans and others with respect to God's command. The core teaching of Islam carries this spirituality, but modern humans cannot understand this fact because they have forgotten how to think spiritually.

As a religion of primordial nature, Islam presents a worldview of nature that equally benefits Muslims and non-Muslims. In fact, Islam supports a basic worldview that is echoed by all other authentic religious traditions. Simply put, Islam does not present something completely new, but rather certifies the same truth common to all other religions. Islam can thus bring all religious and spiritual traditions of the world to a common ground for developing a harmonious relationship between humans and the rest of the creation.

Taking Care of God's Creatures through Duties and Responsibilities (amanah)

Nasr repeatedly states that humans are custodians of God's creatures. This essential responsibility lies in the Quranic term *khalifah* (Quran, 2: 30). The term *khalifah* means the representative or viceregent of God on earth, which allows humans to rule the world on behalf of God. This meaning has become popular in the Islamic world, and most Islamic scholars support it.

But its popularity has been accompanied by a forgetfulness about our duty (*amanah*), imposed by God, to take care of others. In Nasr's view, not forgetting the duties and responsibilities (*amanah*) embodied in the term *khalīfah* wrongly amplifies the superficial meaning of ruling over others (Nasr and BAS 2015: 14–15; Nasr and Iqbal 2007: 95).

For Nasr, since God is the creator and sustainer of all creatures, by being God's *khalīfah* (the representative) on earth, humans have obligatory functions, including taking care of God's creatures (Quran, 45: 13; 31: 20). In this sense, *khalīfah* means taking care of what God has subjugated (*sakbkhara*) under us – animals, plants, and all other substances of the natural world (Quran, 16: 5–6; 16: 10–16; 22: 65; 14: 32–34). Furthermore, Nasr asserts that humans cannot escape this duty (*amanah*), for God has made them His viceregents on earth in order to fulfill this responsibility (Nasr and BAS 2015: 14–15; Nasr and Iqbal 2007: 95). Here Nasr connects this duty and responsibility (*amanah*) with taking care of the environment.

God as the Divine Environment

Nasr compares the Arabic term *muhit* to the English “environment” (Nasr 1993: 131; 1997: 18), arguing that both the Arabic word and the English word imply what it contains. In Nasr's view, *muhit* is the environment. *Muhit* is one of the beautiful names of God. Referring to some Quranic verses (4: 126; 11: 115),¹¹ Nasr states that God is “The Environment” in the sense that He encompasses everything (1993: 131; 1997: 18). If it is believed that God Himself is The Supreme Environment or The Divine Environment, who encompasses all creation, humans cannot deny the sacredness of the divine presence in the natural world (Wersal 1995: 454). By connecting the environment to a name of God, Nasr establishes a deeper spiritual connection that can prompt human beings to be more careful and respectful in their interactions with the environment.

Nature as the Living Sign of God

The Quranic term *ayat* includes both the Quranic verses and the components of nature. The real meaning of *ayat* is a “sign” or an “indication” that helps us to know God. In the Quran, *ayat* includes both revelation from God and everything part of the natural world. The significance of *ayat* implies that the natural world is the living sign of God while what is written (i.e., in the Quran) are the theoretical signs needed to acquire knowledge of God. Put differently, the whole universe works like a vast book, while the directly revealed knowledge is a composed or printed book. This is the beauty of Islam, in that the components of the natural world are as divinely significant as the sacred texts. If nature is viewed as the living sign of God, how can we mistreat it?

The Natural Environment as a Grace of God

By the Islamic term *barakah*, Nasr means the special grace which God bestows on His creatures (Nasr and BAS 2015: 15). This grace is not limited to any specific creature (like humans), but rather is equally applicable to all creatures (Ibid.). Prophet Muhammad relates this special grace to the grace of God's creation, as he states: "Be merciful to those on the earth and the One in the heavens will have mercy upon you" (*Sunan at-Tirmidhi*, hadith no. 1924). Islamic blessing and healing systems articulate all components of nature, which signifies that Islamic soteriology is not possible without the participation of nature in it.

Nature in the Custody of Humanity

Every part of the natural world is under humanity's custody, and we are given permission to use the natural environment for our benefit, but only insofar as our actions are justified. Humans must be careful and respectful toward the natural world. Islam cultivates a sense of responsibility and accountability. After death, humans will stand before God and account for their misuse or abuse of their duties and responsibilities to God and creation. Those who have done well will be rewarded, and those who have not will be punished. Humanity is privileged but this comes with certain basic responsibilities.

These responsibilities lie in the Islamic term *amanah*, which means "custody" or "trustworthy." It is mostly used in the sense of financial transactions, but Nasr uses it with regard to environmental protection. He argues that Islam also does not support any biological alteration (Nasr and Iqbal 2007: 87–88), i.e., bio-engineering or genetic engineering because it goes against *amanah* by affecting an entire ecological system. According to the concept of *amanah*, that which is under the custody of a person must be preserved intact for its eventual return to the original bearer. In line with the spirit of *amanah*, if humans consider themselves to be responsible for something like nature, they cannot modify it in any way but must preserve it in its original form.

Laws of Nature as Laws of God

The laws and orders of nature are not something new to Muslims. Every part of the natural world obeys the orders of God, so the laws of nature work as laws of God. If humans could understand these laws/orders of nature as the laws/orders of God, they would not neglect nature as a machine, but rather they would be compelled to respect these laws and orders.

Nasr claims that this divine idea already exists in the Islamic concepts of *shariah* and *sunnah*. The term *shariah* is generally understood as "religious laws." Nasr does not disagree with this meaning, but also extends it to

include natural law and order, because *sharia*, per se, is the Divine Law. The term *sunnah* usually means the traditions of the Prophet Muhammad, but Nasr also extends it to the traditions of God, referring the Quranic phrase *sunnat Allah* (the wonts of God). For Nasr, “*sunnat Allah* refers to the laws and norms that govern religion as well as God’s creation – the principles by which the world functions” (Nasr 2000: 18). Nasr considers the wonts of God to be the wonts of all things (Ibid.). For him, it is the basic principle by which the universe functions (Ibid.).

In Nasr’s view, our awareness of the divine laws or orders can prevent human mistreatment of the environment. Nasr suggests understanding *shariah* and *sunnah* from the cosmic and divine perspectives in order to reform our views on the environment. He believes that the more humans are made aware of these realities, the less possibility there is for environmental degradation.

Not Corrupting the Earth

Humans are not sent to Earth to corrupt it, rather they are commanded to maintain harmony between themselves and the rest of creation. Those who corrupt or violate the natural system will be punished. The Quranic and the Prophetic traditions call a corrupter and destroyer an enemy of God and His creation. Referring to the Quranic phrase *mufsidūn fi’l-‘ard* (Nasr and Iqbal 2007: 95), Nasr warns humans against corrupting the earth, because it betrays God’s law and the natural order.

Nasr associates *mufsidūn fi’l-‘ard*, usually meaning social or political disorder, with environmental destruction as well. For him, it also refers to those people who abuse or exploit the natural world for their own economic benefit and sociopolitical power. Good Muslims must not corrupt or alter their environment.

Planting as a generous Work

Planting and protecting plant life are considered generous and pious in Islam. The Prophet Muhammad commands his followers to plant trees even if doomsday is nigh! The Prophet further advises them to also not pry their leaves, as even these small parts think upon God in ways human beings cannot understand. His call to plant trees is also in consideration of the other animals who eat from them.

The Islamic term *jannah* means garden, understood to contain many plants and trees. The eschatological significance of trees and plants is that they are signs of beauty and peace. Muslims cannot cut down trees or raze forests without proper justification, but they are told to make significant contributions to the greening of the earth by planting more trees and protecting them from destruction (Nasr and Iqbal 2007: 86–88; Nasr and BAS 2015: 15–16).

Literary Works of Past Muslims Who Loved Nature

Nasr (2017: 10–11) points to Muslim schoolers, theologians, philosophers, mystics, and scientists who wrote works full of love for nature. For example, Nasr names the mystic poets Shaikh Saadi (1184–1283/1291), Jalal Uddin Rumi (1207-73), and Yunus Emre (1238–1320) among others. Nasr also notes that in every language of the Muslim world “there is a very rich tradition of love of nature” (Nasr and Iqbal 2007: 86). Nasr considers all these works inspiring sources of Muslim ecological knowledge (Ibid.). These works frequently suggest rediscovering an intimate relationship between humans and nature. If reread today, they can inspire Muslims and others too.

Environmentally-Friendly Villages and Agriculture

Nasr wants to see environmentally-friendly villages in Muslim countries, where people will show a commitment to protecting the virgin environment around them. Nasr hopes that, in these villages, farmers can adopt organic farming systems to produce eco-friendly crops. Of course, they must first be convinced that modern agriculture is harmful for both human and environmental health and that traditional methods are more beneficial overall (Nasr and Iqbal 2007:91–92).

Nasr believes that agricultural reform must come from the top-level down, so governmental and non-governmental policies and initiatives are needed. All stakeholders should think and act accordingly, otherwise, it would not be possible to establish an environmentally-friendly village and agricultural system.

Increasing Awareness of the Ecological Crisis in the Muslim Mind

For Nasr, if humans are more aware of the present ecological crisis, they will not so easily harm the environment. But scholars must lead the way in this, offering some theoretical frameworks that may be understood by all. In Muslim societies, this important task can be done especially by scholars like *Ulama* (religious educators), *Imams* (who lead congregational prayers), and *Sufis* (Muslim Mystics), along with other leaders (Nasr 2003: 88–90; Nasr and Iqbal 2007: 88). Unfortunately, these groups are not concerned enough about the present ecological crisis.

Muslim countries must therefore cultivate scholarship in environmental studies and Islam, and then these scholars should be appointed to institutes and research centers that train *Ulama*, *Imams*, and *Sufis*, preparing them to lead all other Muslims in environmental sustainability. These scholars and leaders should have the freedom to express their learned opinions, even if their governments have eco-unfriendly policies or investments in eco-unfriendly development, production of energy. It is equally important for

both public agencies and citizens to respond to ecological issues from their own perspectives and find cooperation.

We Cannot Wait for Divine Intervention

Some people believe that it is too late to save the world from destruction (Nasr and Iqbal 2007: 94). In Nasr's view, these frustrated Muslims are waiting for divine intervention by Imam Mahdi, just as Christians await the second coming of Jesus Christ. Nasr does not like this mentality and prefers to emphasize the potentiality of every human to contribute to a lasting solution.

To achieve such progress, Nasr focuses on diverting human attention away from our current destructive practices toward a more amicable approach to the natural world. In Nasr's view, as responsible creatures of God, humans should attempt to save the world through their own affirmative actions. Instead of waiting for divine intervention, Nasr wants to instill a sense of responsibility in the Muslim mind for addressing our great crisis.

Why Nasr Relies on Traditional Views of Nature

Despite his familiarity with modern science, Nasr relies on traditional wisdom for a number of reasons. As a historian of science, Nasr understands its unfriendliness toward the natural world, looking upon nature as a machine disconnected from both humankind and God. For Nasr, modern science and technology are only used for increasing humanity's size, power, and comfort. This one-sided knowledge and use of technological power are incompatible with ecological equilibrium.

In his works (1976; 1993; 1996), Nasr reiterates that environmental problems are a result of modern science. Before its advent, there was no ecological crisis (at least not one comparable to what we are facing today), because the human–nature relationship was intact. Thus the real solution is in the past, not in the present or future. The theology and a philosophy of pre-modern, pre-industrial society hold the wisdom needed to restore balance (Mascall 1970: 103), as real sustainability comes from restoring the sacred value of nature (Mevorach 2015: 3). Nasr repeatedly characterizes present environmental degradation as a spiritual crisis (1996), for modern humans do not feel a spiritual connection with the environment. Nasr clearly blames the secular worldview, supported by scientism,¹² as the root cause of the ecological crisis (Nasr 2017: 9–10).

Without rediscovering sacred science and reintroducing the moral foundations of religion, Nasr does not see any possibility for avoiding further environmental disasters. For him, the faith and spiritual traditions of the world can work for environmental sustainability (1996; 1998), as these belief systems deal with perennial philosophical views or eternal wisdom. As a traditionalist,

Nasr seems optimistic that religious moral teachings and spiritual guidance may reduce the ecological crisis by keeping humanity in balance with nature. As Nasr sees environmental problems as a spiritual crisis of modern humans (1993: 125; 1976: 17), his vision and mission are to revitalize a spirituality, attitude, and behavior mindful of the sacred quality of nature.

Nasr has based his approach on traditional wisdom in order to reconcile God and humans (Heinen 1994: 682). In Nasr's view, such reconciliation can motivate humans to maintain a balanced and participatory relationship with God's creatures as God's viceregents (*khalīfa*) on earth. For the same reason, Nasr wants to maintain the primordial relationship (*fitrah*) for a clearer understanding of the God-human-nature relationship. Nasr relentlessly reminds humans to restore their intimacy with nature that has been broken by the so-called scientific worldview of nature. Until this broken relationship is restored, there will be no viable solution to the ecological crisis.

In his methodological approach, Nasr firmly supports the (re) sacralization of nature and avoids anthropocentrism. For these reasons, Nasr does not emphasize green technology, renewable energy, or modifying of modern economics, but maintains that the restoration of the human-nature relationship comes only through traditional religious wisdom.

A Critical Analysis of Nasr's Eco-religious Understanding

One must appreciate Nasr's extensive work on the environment in connection with traditional worldviews. He has made a praiseworthy effort to divert our attention from the present scientific worldview of nature toward the traditional worldview. He has taken the brave initiative to rediscover the sacredness of nature, completely ignored by the modern science, arguing that it offers the only permanent solution to the ecological crisis. By revealing the consequences of the mechanistic-materialistic worldview of nature, Nasr refocuses us on a traditional worldview of nature and its balanced God-human-nature relationship.

Despite its merits, someone could argue that Nasr's work is too idealistic and lacks practical solutions. David L. Johnston criticizes Nasr for not moving "beyond the philosophical level to solve the specific issues of biodiversity loss and global warming" (2012: 223). Furthermore, he adds that even Nasr cannot give so much importance to *sharia* "as a practical tool for resolving the current crisis" (Ibid.). It is true that Nasr emphasizes philosophical discussion rather than concrete action, which limits his appeal.

Huston Smith criticizes Nasr for misunderstanding perennialism by identifying it with a religious philosophy (2001: 150). Indeed, Nasr makes little distinction between perennialism and religion. Robert Cummings Neville believes that Nasr fails to distinguish philosophy and religion (2001: 169). Similarly, Sallie B. King finds Nasr's attempts to distinguish between traditions and authentic religions unsatisfactory (2001: 209–210). It certainly is hard to see a decisive demarcation between traditions and authentic religions

in Nasr's statements, though Nasr deals with both terms differently. Similarly, the way Nasr tries to expose the difference between sacred and profane remains vague. Scholars may not be satisfied with Nasr's understanding of sacred, as *everything* is sacred in Nasr's eye. What, then, is the profane? Another major problem of Nasr's views is his disparagement of modernity and modern science, which he blames for essentializing nature as mathematical and mechanical. Some have criticized this, arguing that modern science understands the natural world much better than the traditional systems Nasr advocates.

Though Nasr's theological understanding of God in connection with humans and nature is mainly based on Sufi (Islamic mystic) tradition (Parrinder, cited in Liu 2001: 264), more conservative Salafis and Wahabis generally oppose Sufism. While Sufis might be honest in their own understanding of God, some of their ideas seem problematic with respect to the authentic sources of Islamic knowledge (the Quran and the Sunnah). Some Sufi concepts – *wahdat al-wujud* (oneness of appearance) (innovated by Ibn Arabi), *wahdat ash-shuhud* (oneness of being) (innovated by Ahmad Sirhindi), *fana' fi Allah* (extinction of the self in God) and *baqa bi Allah* (eternal life in God) – are controversial to non-Sufi Muslims because of their similarity to pantheism, even though these terminologies do rightly suggest a deeper human–nature relationship. As a perennial philosopher, Nasr uses these terms in order to focus on the primordial relationship between the Creator and the created. But in emphasizing this esoteric view of God, Nasr neglects the exoteric view of God, suggesting that he reduces the Islamic concept of God to only the Sufi (mystical) understanding. The Islamic God is known in both esoteric and exoteric ways, while Nasr emphasizes only the former. This raises the question of whether Nasr has envisioned a world only for saints (McLean and Khuri 2001: 348). The limitation of Nasr's theology is that it seems inaccessible to non-mystics, further showing how idealistic it is. What about the eco-spiritual awareness of everyday Muslims? Though Nasr's esoteric understanding of God in connection with humans and nature can lead to spiritual reform and progress, he has not offered any practical steps.

Nasr's theory of transcendence or esoteric unity has also been criticized. Sallie B. King is not supportive of his inclusion of Buddhism, for instance. For King, Nasr's articulation of the transcendent unity of religions is based on two fundamental Islamic principles: (1) monotheism and (2) universal revelation (2001: 218). Indeed, Nasr's perennial philosophy claims that each person is born with a concept of the one almighty God, but it is difficult to include Buddhism and Jainism, and even Taoism and Confucianism, in this category. Though Nasr's perennial philosophical definition of revelation includes Buddha's self-illumination, his understanding of God cannot encapsulate non-theist Buddhism.

Nasr uses the transcendent unity of world religions as a basis for multifaith dialogs, arguing that these religions basically share the same reality, though manifested differently through culture. This approach for multi-religious

dialog is criticized by Parrinder for essentializing the concept of God to the perennial philosophical understanding. Furthermore, Nasr's comparison seems to be competition: East against West, past against present, and tradition against innovation (cited in Liu 2001: 264). Parrinder's argument is at least partially valid, as there are some critical differences in faiths that are brushed aside. On the other hand, Parrinder wrongly evaluates Nasr's core objective of multifaith dialog to be competition and contradiction among dialog partners. What Nasr attempts to achieve here, rather, seems to be legitimate cooperation, complementation, collaboration, and mutual illumination among the spiritual and religious traditions of the world.

In Shu-Hsien Liu's view, Nasr lives in a world of ideas that can only be associated with the ancient and medieval philosophical understanding of nature (2001: 256). With this traditional approach to nature, Nasr cannot convince a wider audience which is too familiar with modernity (Ibid.). To return to the traditional worldview, as suggested by Nasr, means to go back to a dark age characterized by slavery, the subjugation of women, and tyrants claiming to "have received the mandate of Heaven" (Liu 2001: 257, 262). In fact, Liu considers Nasr's bad impressions of modern worldviews to be prejudice (2001: 260). However, Liu possibly misunderstands Nasr's understanding of eternal values and virtues. Going back to the "traditional value systems" does not mean going back to the dark ages, but rather means seeing things from a human-nature relational perspective. Nasr's thought does accord more with pre-modern philosophical views rather than modern and postmodern periods, but he means to restore its good philosophies and ethics, not the problematic aspects of pre-modernity.

In their work (2001: 348), George F. McLean and Richard K. Kuri describe Nasr's vision as appropriate for "saints" (i.e., enlightened religionists, mystics) but not for humanity in general. However, Nasr sees humanity from a holistic body-mind perspective and is reluctant to distinguish between a "layman" and a "saint." It is not logical that a layman's view of nature is destructive while a saint's view of nature is ecologically friendly. Both average folk and religious leaders and mystics should share the same ecological common ground.

On the other hand, Nasr does speak through an esoteric or mystic language that is difficult for even religious scholars to comprehend, not to mention laypersons. If scholars and non-scholars alike cannot grasp his meaning, of what use are his proposals? The problem is that modern Islamic thinkers lack a firm understanding of ecology, and thus cannot truly appreciate Nasr's insightful thoughts.

For critics, Nasr's traditional view of nature is considered to be "a nostalgic appeal to tradition with no real consequences for the current problems surrounding modern science" (Ibrahim Kalin 2001: 445). However, it cannot be denied that such thoughts can move modern humans toward environmentally-friendly lifestyles. Still, Kalin shows how Nasr's notion of the traditional sciences might be too religious and metaphysical (2001: 485).

Scholars may also argue that Nasr has not offered a convincing alternative to modern human living. Modern humans are already used to their current lifestyles and may find Nasr's proposals too impractical and utopian (O'Move 1970: 58; Heinen 1994: 682). Nasr remains uncompromising in his vision, so we can certainly criticize him for being stubborn and too intolerant of modern science. Nasr cannot seem to articulate a moderate approach between traditionalism and modernity, insisting instead on a total change of what we have been doing for the past four centuries.

Policy analysts could argue that if Nasr's suggestions were implemented, it would take far too long. A better question is: what should be done *immediately*? Should we wait for revolutionary reform as Nasr suggests? Or might we better think of less drastic changes? As far as these questions are concerned, Nasr's proposals for short-term action plans are helpful but not enough.

Furthermore, Nasr's theme of retrieving old traditions has hardly left space for people of no religion. Many will not support an initiative purely based on religious grounds. Without the cooperation of this sizable portion of the human community, the ecological crisis cannot be resolved. And for some scholars, Nasr's proposals are too radical and uncompromising, set upon conflict with modern science and economics. Rather than polemics and conflict, are there not practical steps we can take?

The way Nasr compares the abuse of nature with a prostitute may also be inappropriate. Some might argue that Nasr could have used the more positive and less judgmental metaphor of a mother instead of a prostitute. Many environmentalists already compare the natural world to a mother ("Mother Nature"), out of respect and love. This might be a better way to express the situation.

Nasr's eco-religious vision also seems one-sided due to his reluctance to criticize his own faith tradition or "traditional society." Every religious and cultural tradition has seen its members abuse nature for social, economic, and military purposes. Nasr should more honestly appraise the mistakes of cultural and religious traditions, Islam included, rather than uncritically lift them up as ideal environmentalist societies. Nasr has even been criticized by some in his own community on this point. For instance, Nariman Gasimoglu told me:

Although his views on religious spirituality may be motivating, they are not convincing, in my opinion, when he touches on religious traditions, or religious worldviews as manifested by the Divine. No doubt, the roots of the current ecological crisis are in humanistic renaissance ideas, but also come from corrupt religious assumptions about the natural world which are still dominating religious minds. Therefore, when he postulates religious traditions as a remedy that radically changes our attitudes towards nature, I guess his suggestions seem to be oversimplified.

(Personal Communication, 30 November 2019)

Nariman's criticism of Nasr's traditional worldview seems justifiable, because the hierarchical value system is, more or less, a very common element in all religious and spiritual traditions of the world. It has also been misinterpreted in many ways by religious scholars and leaders, in the past and today, to justify the instrumental value of the natural world for our economic and military interests. Though general practitioners of traditional religions do not see nature as simply matter and/or machine, and did not destroy the natural world in such a massive way, as does modern society, they are not completely free from guilt. This point is overlooked by Nasr.

Nasr's proposal for going back to the "traditional" worldview can also be misconstrued by modern scientists as old-fashioned and backwards. Furthermore, a basic question immediately comes to mind: how is it possible to bring back ancient ideas? Only a worldwide autocracy could force such a thing. Nasr's proposals seem not just impractical, but fantastical.

Though this critical analysis has exposed some weaknesses in Nasr's thought, we cannot deny the significance of his eco-religious vision. Like Cobb, he has found the historical and philosophical roots of the ecological crisis and brought them to our notice. With deep insight, Nasr connects our present ecological crisis to a problem of faith and spirituality. By so doing, Nasr offers a robust challenge to the modern scientific understanding of nature and has helped prompt a change in our thinking.

Conclusion

Nasr's work on environmental issues from a traditional perspective is remarkable. He discusses the fundamental causes of our present environmental problems by searching for their philosophical roots in the rise of materialistic and rationalistic modernity. He shows how we have come to treat the world with hostility, as if it were a soulless machine, forgetting the intimacy our ancient ancestors shared with nature. For this reason, Nasr wants us to rediscover the sacred quality of nature, bringing about another paradigm shift from the modern scientific worldview back to the spirituality-based worldview of tradition.

For Nasr, only a deeper spiritual understanding of nature and a strong human-nature relationship can avert catastrophe. This requires the traditional religious approach to the natural world, using sacred and traditional science instead of modern science and technology. We must move from an empirical and mechanistic scientific worldview to a spiritual worldview of nature. Though Nasr's proposals can be criticized as one-sided and impractical, no one can deny his passion.

Notes

- 1 The scientific worldview of nature, as presented by physical scientists, is a completely materialistic view of the universe. According to this view, “the universe consists of ontologically unrelated material entities with no reference to any supra-natural source of their existence” (Quadir 2013: 5).
- 2 It is difficult to determine the exact period of the European Renaissance. Generally, it is considered as starting at the end of the Middle Ages up until the advent of modernity, i.e., between the 14th and 17th centuries.
- 3 For Saniotis, during the European Renaissance “nature is increasingly desacralized and de-mystified,” and this process continues up to the nineteenth and twentieth centuries (2012: 165). He echoes Nasr in that for him the desacralization of nature is a result of a humanism that supports the domination of nature for economic benefits (Ibid.).
- 4 The term “tradition” implies a set of beliefs, customs, attitudes, behaviors, stories, and the like, that are transmitted from one generation to another generation. By a process of continuation, it connects the past with the present. Like a mirror, it reflects the treasury of knowledge of the eventful past and reminds the present generation about it. Tradition is an inseparable part of human civilization. Throughout the history of human race, tradition is valued as a source of guidance and a supporting idea for human progressiveness, but unfortunately, since the Enlightenment, it has been viewed in opposition to modernity and progressivism. It is true that traditional experiences and knowledge cannot support our current uncontrolled lifestyles, as they promote social and ecological balance.
- 5 The religious worldview of nature is a view of the natural world which is expressed in the authentic religious scriptures. According to this view, “the universe consists of signs of God” (Quadir 2013: 5).
- 6 This kind of approach is, as Nasr calls it, *scientism*, an ideology that considers the physical sciences to have the only acceptable criteria to measure things. So, for modern humans, it is “the most reliable means to true knowledge” (Quadir 2013: 5).
- 7 It deals with the scientific and philosophical understanding of the universe.
- 8 In the cosmological discourse, it articulates the spiritual world with the material and physical reality. In it, the Divine Reality is seen as the creator, because it is believed that “the cosmos is sustained by Divine Reality” (Beringer 2006: 35).
- 9 Probably this term was first used by Agostino Steuco (1497–1548) as *perenni philosophia*, though it is commonly believed that the term was coined by Gottfried Wilhelm von Leibniz as *philosophia perennias* (Markwith 2009: 43). It deals with the metaphysics “that recognizes a divine reality of the world” (Huxley 1990 [1944]: vii, 2, cited in Beringer 2006: 28). It covers the issues like soul, spirit, mind, and the like. It also tries to answer how things were formed through spiritual and material amalgamation.
- 10 Wahabis are against the veneration of mystics (Sufis) and label some of their interpretations of esotericism as un-Islamic. Some do not even want to recognize Sufism, or any other Islamic sect for that matter, as Islamic. Though it started as a reformist movement by the eighteenth-century scholar Muhammad ibn Abd al-Wahhab (1703–1792), who wanted to protect monotheism from increasing practices of idolatry (i.e., undue veneration of Islamic saints), today it is considered intolerant by many.
- 11 The Quran says, “And to Allah belongs all that is in the heavens and all that is in the earth. And Allah is Ever Encompassing all things” (4: 126). In another place, it is said, “... so wherever you turn there is the Face of Allah” (2: 115).
- 12 Scientism is viewed as an ideology that rejects knowledge from sources other than the empirical sciences. For instance, *intuition* is denied by scientism. As Nasr notes,

“anything that modern science cannot study is either unreal or irrelevant” (2017: 9).

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5 Comparison and Appraisal of the Eco-Religious Understandings of John B. Cobb and Seyyed Hossein Nasr

Introduction

In the previous two chapters, there was much discussion on Cobb's and Nasr's eco-religious understandings, exploring how they have connected their respective religious traditions to ongoing environmental problems. The present chapter presents a comparative analysis of their work, identifying some convergences and divergences in their eco-religious conceptions and proposals. It evaluates some key points of their thought with regard to existing approaches to environmental issues. This chapter is also critical of their thought, both with respect to their faith traditions and also from some practical grounds. Here Arvind Sharma's reciprocal illumination approach is used to cross-reflect their body of work.

Some Basic Information About Both Scholars

John B. Cobb's basic education is in mainline Christian theology, but later he became interested in process philosophy and process theology, being a pioneer of the latter. Process philosophy is how he understands nature and ecology, and process theology allows him to respond to environmental problems by reconstructing traditional Christian views of the environment. His eco-theological understanding deals with the reconstruction and reformation of Christian theism.

Unlike Cobb, Nasr's educational background is in science; he only later becomes interested in perennial philosophy and spirituality. In his works, Nasr tries to reconnect the natural world with the human heart through the recovery of tradition (Sayem 2018c: 314), particularly Islamic moral guidance on nature. In his eco-religious understanding, he emphasizes wisdom traditions, perennial philosophies, and the sacred features of nature.

While coming from different theological and scientific backgrounds, respectively, Cobb and Nasr have converged on the common issue of the present ecological crisis. However, their theoretical discussions still differ in important ways.

How They Relate Religions to Environmental Issues

Cobb was disappointed with Christianity's historical conduct with respect to the environment, including its anthropocentric reading of Scripture. In his view, the Bible's human privilege is inseparable from humanity's caretaker role, but the Church has too often ignored this. Humanity's role as God's steward or trustee was forgotten, and Christianity's theology of human supremacy indirectly supported similar views in science and technology. Through his constructive criticism of the church and its theologians, Cobb calls for reinterpretations of Scripture that more correctly identify human responsibility toward nature, reconstructing Christianity's moral teachings for the purpose of ecological equilibrium. His knowledge of process philosophy and process theology allows him to do this.

Like Cobb, Nasr also criticizes the Christian Church for not raising a strong enough voice against modernism and scientism with respect to ecology. Nonetheless, Nasr acknowledges that, as a major religious tradition, Christianity has the following and spiritual resources to respond to the ecological crisis. Consequently, he calls for a new Christian theology, i.e., an eco-theology, in order to deal with the present environmental problems from a Christian theological perspective. While focused on Islamic faith and spirituality, Nasr tries to articulate the role of all religious traditions in the discourse of the ecological crisis, though he prefers to refer to the Eastern traditions more than the Western traditions (Nasr 2000: 18–20). In Nasr's view, traditional ideas of nature are necessary to maintain environmental sustainability. Perhaps, for this reason, he prefers to call himself a traditionalist instead of a modernist or reformist. He argues that environmental sustainability lies in the traditional ways of understanding. All traditions are, in his view, the treasures of the world, and people should utilize their wisdom for solving ecological problems. Nasr supports retrieving traditional knowledge more than reconstructing or reinterpreting it.

The common points are that both scholars agree that the current ecological crisis is a direct product of modern science and technology (Cobb 1972: 33; Nasr and Iqbal 2007: 76). If there is any deficiency in religions, it is that faith institutions and communities have failed to play the positive roles demanded by their own theological and moral teachings. For Cobb and Nasr, these moral teachings can strongly motivate human perceptions and behavior toward the just treatment of non-human animals and other parts of creation. Revitalizing these moral guidelines for the sake of environmental sustainability is necessary. Both Cobb and Nasr attempt to connect faith, especially their own respective traditions, with current ecological problems in order to foster a more sympathetic attitude toward the natural world.

While Cobb is critical of the role of the Christian church and theologians (Cobb 1992: 2), Nasr is not particularly critical of Islam. Cobb's style is reformative and reconstructive, while Nasr's style is revivalist and explorative.

Despite the differences between them, it is possible to appreciate and constructively compare both approaches. Here Nasr's retrieval approach can help keep Cobb more sympathetic to the original, *traditional* Christian views of nature. As noted in earlier chapters (also in Sayem 2020c) Cobb is certainly found of Scripture, Old Testament prophetic teachings, and Christian "ecologists" like St. Francis of Assisi. So clearly Cobb is not following a completely radical post-modern approach, even if he is hardly a traditionalist. Though Cobb does not agree with Nasr completely on some points – for instance, the "sanctity of life" and "sacred features of nature" – this does not necessarily mean that he denies such ideas. Rather he uses similar, though more modern, vernacular from his linguistic-historical context. For instance, Cobb has no real objection to Nasr's "sanctity of life" and "sacredness of nature," if these refer to the intrinsic value of life.

Similarly, Cobb's reformatory approach can allow Nasr to realize the necessity of practical, immediate steps for addressing the ecological crisis. Cobb's reconstructive thought can also inspire Nasr to contextually rethink some traditional understandings of the relevant Quranic verses and prophetic teachings with respect to environmental problems. As Nasr has already reinterpreted some relevant Islamic teachings with respect to human responsibility for the natural world, he must feel it necessary to reconstruct some traditional ideas for contemporary discourse and practice. Though Nasr claims himself to be a traditionalist, the way he relates Islam to the ecological crisis is still somewhat reconstructive, though Nasr could not support a reformation of traditional religious views to the extent Cobb does. Nevertheless, Nasr's more idealistic approach to environmental questions can certainly benefit from Cobb's more realistic approach. Nasr cannot deny the differences between ideality and reality. Though he certainly cannot accept Cobb's process theology, Nasr does not raise any major objection to his concrete proposes, such as ecological asceticism, traditional agriculture, recycling, renewable energies, etc.

How They Used a "Metaphor of Life"

Both Cobb and Nasr consider the natural world to be something *living* (Cobb 1972: 25–28; Nasr 1993: 119–125). They argue that the ecological crisis began when nature was rendered lifeless through modernity's metaphor of the machine (Birch and Cobb 1982: 263; Nasr 1996: 3–4; Nasr 1976: 14). They criticize modern science and the "secular" scientific worldview for certifying nature as dead and viewing it mechanistically, rather than organically. If nature appears as something lifeless, human beings cannot sympathize with it. How can we relate to something "dead"? Such an ecology turns nature into an instrumental object for our own purposes, which leads to abuse, misuse, and destruction. But these two scholars agree that humans would behave more responsibly toward something understood to be living.

For Cobb and Nasr, the main cause of our unprecedented ecological crisis lies in the secular scientific understanding of nature. If the present perception that “nature is lifeless” is not changed substantially to the perception that “nature is alive,” humans will not be convinced to behave responsibly toward the world. Both scholars attempt to rectify this human perception of nature in their own ways. Cobb tries to show that the natural world is not like a machine or something dead, but rather is a great organism in which everything is interdependent and interrelated (Birch and Cobb 1982: 17, 42, 123, 240). He argues that modern biological science does not actually support the mechanistic view. Through a deep metaphysical discussion, Nasr tries to show that though the natural world may seem dead *externally*, it is in fact not dead but rather alive (Nasr 1996: 24, 271; 2017: 8).¹ Referring to many verses of the holy scriptures and the spiritual views of many mystics, Nasr attempts to convince humans that the mechanistic view is wrong. Both Cobb and Nasr take the initiative to present nature through the metaphor of life, though their approaches are somewhat different. Cobb ties this metaphor to biological and ecological science, while Nasr connects it with the spiritual and metaphysical understanding of nature derived from tradition.

Here Nasr can benefit from the way Cobb uses the metaphor of life. Cobb knows that the religious understanding of nature goes against the mechanistic and materialistic conceptions of nature. That is why he criticizes Descartes and Kant for supporting such ideas in opposition to the spiritual feeling (Sayem 2020c: 256–257, 260–261) that nature is alive. Cobb’s bio-pyramid and hierarchy of values also support these things. Cobb presents some factual data from biology in order to strengthen his argument for this metaphor of life. This scientific evidence can likewise help Nasr strengthen his argument that “nature is alive.”

Similarly, Cobb can benefit from Nasr’s metaphor of life, which arises from spiritual contemplation of the deeper connection between nature, humans, and God. Cobb also knows about this loss of our spiritual feeling for nature, so why not retrieve this lost treasure by emphasizing traditional spirituality and metaphysics? Nasr’s arguments and the evidence for the consciousness of all-natural life can help Cobb reorient his ideas in a more religious way.

Cobb and Nasr and Approaches to Environmental Ethics

For Cobb and Nasr, though current environmental ethics talk about the moral obligations human beings have toward the environment, it fails to establish a spiritual, emotional, and moral feeling for the environment. In their view, without the cooperation of the world religions, it is simply not possible to grow this kind of consciousness. Unfortunately, secular environmental ethics does not consider religious moral teachings to be an influential agent for motivating the current human perception of nature. If

we assess their eco-religious understanding in light of the approaches of environmental ethics,² we will find that their thought favors a bio-centric value approach more than others.

Cobb's Understanding of Value in Environmental Ethics

Though Cobb accepts the hierarchy of creation and the bio-pyramid (Cobb 1972: 53; Birch and Cobb 1982: 205), which implies human privilege, he does not deny the intrinsic value of other non-human entities. He criticizes Christian scholars and theologians for misinterpreting Biblical verses (esp. Gen. 1: 28) and denying the value of other organic life (Cobb 1992: 92–94). He suggests interpreting Gen. 1: 28 together with Gen. 2: 15 in order to have a clearer comprehensive understanding of the relationship between humans and other non-human creatures and substances. He argues that everything God made has its own value (Cobb 1972: 117) but all is not valued equally (Cobb 1972: 53; 1982 with Birch: 205). He is thus convinced that the Bible never supports anthropocentrism (Cobb 1992: 93), though humans are given special dignity over other creatures. For him, if there is any “centrism” in the Bible, it is God-centric, not anthropocentric. In Cobb’s view, it is the fault of Christian scholars, theologians, and Christian institutions – not of Christianity itself – that the theocentric interpretation was replaced by an anthropocentric one over the centuries (Ibid.) Cobb’s eco-theology is apologetic in this respect, as he recognizes some Christian misconceptions and misbehaviors toward nature which he seeks to correct.

When Cobb talks about the intrinsic value of biotic organisms, it is similar to a “bio-centric” approach due to his emphasis on biological organisms. When he talks about the relationship between living and non-living parts of nature, it is “eco-centric” because he is keeping the broader ecological relationship at the center of discussion. When he talks about the hierarchy of values and the biotic pyramid it may be misunderstood as an anthropocentric approach by some environmentalists, but it is actually a “theo-anthropo-cosmic”³ approach. In a sense, this is a *reflexive* approach because it seeks transformation through a person realizing they are part of a greater community, i.e., the ecosystem. Cobb encourages every individual to holistically integrate themselves in the ecosystem, so we might also call it an *integrative* approach. Cobb also appreciates the beauty of nature and asks us to not alter living and non-living substances, so we can also say that his is an *aesthetic* approach.

Though Cobb does not want to leave the issue of the ecological crisis only in the hands of politicians, he emphasizes a collective effort from the individual to the international level. For example, Cobb’s proposals for bioregionalism and an ecological civilization require political implementation. Considering this, Cobb takes a *political* approach, asking political leaders to favor renewable energy sources, sustainable environmental policies, and green technologies.

Cobb does not seem satisfied with the Biblical stewardship theme, arguing that the concept itself negates eco-centrism and supports anthropocentrism. A stewardship approach still sees the natural world from the perspective of instrumental value.

As Cobb does not promote a unified or universalistic ethical code for humanity due to our diverse moral views of nature, we can call him a supporter of a *pluralistic* approach. He argues that as all human beings do not belong to the same tradition, they have their own understanding of nature which should be respected. The way Cobb relates his eco-theological and biospheric visions with the present environmental crisis is a *contextual* approach. With an *exploratory* approach, Cobb exposes (with great detail) the mistakes of past Christian theologians, religious leaders, and communities. In some of his writings, Cobb discusses current ecological problems by correlating them with Christian Scripture and moral views, i.e., a *correlative* approach. Cobb is a promoter of multi-faith dialog on ecological issues. On this point, Cobb offers a theoretical discussion on why and how faith traditions should come together for dialog and collective environmental action – ergo a *dialogical* approach.

While somewhat closer to biocentrism, Cobb's eco-theological understanding simultaneously covers the three mainstream value approaches of environmental ethics – anthropocentric, bio-centric, and eco-centric. Though Cobb appreciates earthism and the "Gaia hypothesis" as important environmental movements in opposition to economism, he is also critical of these ideological approaches because of their tendency to replace God (Cobb 1994: 40; 1999a: 7, 179). For Cobb, as God's caretakers, we humans cannot allow God to be marginalized. He would also prefer to avoid unnecessary disputes among the main environmental movements – deep ecologists, social ecologists, eco-feminists, sustainable agriculturalists, green movements, etc. He calls for a combined effort between them to halt our unprecedented ecological crisis. As mentioned before, Cobb does not want to rely on the traditional stewardship concept or modern environmental ethics because both are insufficient (Cobb 1972: 124; Birch and Cobb 1982: 150). He has developed certain frameworks like ecological asceticism (Cobb 1972: 58, 63), the ecological model of life (Birch and Cobb 1982: 122–123), and the ecological model of development (Cobb 1994: viii; Daly and Cobb 1994: 229) in order to better address our crisis. In this way, Cobb's eco-theological approach seems inclusive, critical, and practical in terms of implementation.

Nasr's Views of Value Approaches to Environmental Ethics

Like Cobb, Nasr recognizes the hierarchical relationships in the environment (Nasr 1993: 136, 140; Nasr 1996: 161). For him, such relationships are commonly accepted among the religious and spiritual traditions of the world. He considers this kind of relationship to be universal (Mevorach 2015: 146). Nasr's God–Human–Earth hierarchical-relational approach

does not conform with the anthropocentric value approach of environmental ethics. In a radical anthropocentric approach, humans are kept at the center of everything, but in Nasr's relational model, humans are positioned between God and nature and must be mindful of their inescapable relationship with the Creator and the created. The inevitable connectivity of humans with God and nature can be sustained only when humans are conscious about their delegated responsibility (stewardship) from God, which is called *amanah* in Arabic. Although humans are given a prestigious status among God's creatures and are permitted to benefit from the environment, they are responsible for God's creation, which implies that true human dignity lies in responsible behavior toward the natural world, and in no way should humans misuse their privileged positions to exploit the natural world for their own uncontrolled desires. More significantly, Nasr's "responsibility precedes rights" declaration presents humans as stewards, and human responsibility is prioritized over human rights with respect to ecological sustainability. Nasr's is clearly a *stewardship* approach.

Nasr criticizes the anthropocentric understanding of the environment supported by modernity. In the secular worldview, God and nature have no value; secular philosophers and scientists understand nature as a machine, the only purpose of which is to serve human beings. In Nasr's view, modern human beings have transformed the traditional anthropocosmic view of nature into a radical anthropocentric view through scientific knowledge. They are not capable of respecting what they see as a "dead" substance, leading them to exploit the natural world in a brutal way. His criticisms of anthropocentrism and modern science imply that his approach does not comply with any modern scientific approach.

Nasr is critical of modernism and scientism, blaming them for distancing humanity from eternal wisdom. For Nasr, traditional wisdom can offer a holistic vision of the God-human-nature relationship, while the modern scientific worldview presents a fragmentary vision of this relationship, keeping humans the central focus of everything. It goes from a traditional anthropocosmic view to a radical anthropocentric view (Mevorach 2015: 146). For Nasr, anthropocosmism deals with a deeper relationship between Heaven and Earth, with humans in the middle. Nasr argues that this holistic relationship is central in traditional societies, thus they respected nature with deeper understanding and feeling. Since Nasr insists on traditional knowledge and the understanding of nature for ecological sustainability, he is called a traditionalist, taking a *traditional* approach which can also be considered an anthropocosmic approach.

Seeing nature as part of God's calling existence into beings, Nasr considers nature a state of consciousness and being (2017: 8). He argues that God's command ("Be – and it is" [Quran, 36: 82]) cannot be unconscious, which implies that creation, as the result of God's command, is conscious and that we live in a living world, not in a dead world. From this, Nasr contends further that every substance of nature is a manifestation of God's

command, which has its own intrinsic value according to its hierarchical position in creation. In Nasr's view, to respect this value means to be respectful to God. Such a view of nature may have a close affinity with the bio-centric and eco-centric value approaches, but it seems much deeper than the bio-centric and eco-centric approaches when it comes to connecting humans with the Creator and the created. In a radical bio-centric approach, the God-granted status of humans is lowered to the same level as other non-human entities in the environment, but in Nasr's vision, the special dignity of humanity is not so reduced, humans being at a higher level than non-human animals. However, Nasr's view is similar to a bio-centric approach in the sense that he never ignores the right of all life to live on Earth, supporting the inherent value of all living organisms irrespective of humanity (Nasr 1976: 48). Similarly, Nasr's approach also relates to the eco-centric approach in the sense that he shows the important, intimate relationship between humans and the rest of creation. Though because eco-centrism also assigns a modest position to humanity, it is not fully compatible with what Nasr is proposing.

Nasr's approach to the environment also does not comply with earthism and the Gaia hypothesis, because both of these radical environmental movements replace God with the Earth itself. Nasr maintains God as immanent and transcendent. In Earthism, our planet is the central focus, while the Gaia hypothesis presents Earth as a deity. In neither is a Creator God recognized.

Similarly, the deep ecological and social-ecological approaches do not match with Nasr's God-Human-Earth hierarchical relationship model of the environment. Deep ecologists argue that the present environmental crisis lies in the misplaced privilege assigned to humans over all other living entities. In their view, environmental justice is not possible until this special status is revoked. On the other hand, social ecologists argue that environmental sustainability requires complete social change and reformation. Eco-feminists argue for complete elimination of the patriarchal social system in order to ensure environmental protection. Nasr is critical of deep ecologists and social ecologists for focusing on human privilege while being silent about other causes of the ecological crisis, in particular modernity's mechanistic and materialistic worldview of nature.

Though Nasr appreciates sustainable agriculturalists (Nasr and Iqbal 2007: 92–93) and green movements (Nasr, personal interview with author, 21 June 2019) for their concern for ecological equilibrium, he does not agree with their methods. Nasr believes that they offer only partial views of the overall problem and their limited practical solutions are not enough to solve it.

Is Nasr's approach *apologetic* in any way? Probably not. Nasr does not express any dissatisfaction with the traditional religious views of nature, preferring to show the ecological strengths of the traditional ways and religious wisdom traditions.

Nasr criticizes modern science and technology for destroying the virgin beauty of the natural world. In Nasr's view, nature provides for not only our material needs but also feeds our minds. Nasr enjoys describing the natural beauty of mountains, rivers, lakes, flowers, forests, etc. If his fondness for nature and his narrative descriptions of beauty are considered, we could say that Nasr has an *aesthetic* approach. Nasr's experiences of nature's beauty reflect his mind. This reflection is seen in some of Nasr's works, where he attempts to clarify how an artistic mind can be charmed by observing the beauty of nature. Since Nasr talks about a reflexive view of nature, we can also say he takes a *reflexive* approach.

For Nasr, traditional worldviews describe the sacred features of nature that are denied by the scientific worldview. In Nasr's view, until these sacred features of nature are restored there is no permanent solution to our present ecological crisis. While science and technology can help, this implies that Nasr does not see integrating the traditional worldview with science as a helpful method. Nasr's understanding thus does not comply with an *integrative* approach.

To some degree, Nasr's traditional approach may be seen as a *pluralistic* approach in the sense that his religious and spiritual understanding of nature does not exclude any "authentic" faith tradition. For Nasr, not only Islam but also other religious and spiritual traditions contain the same Truth manifested in different forms. Certainly, if a pluralistic approach is meant to include *all* groups of people and their ecological understandings, then it does not apply to Nasr, as he does not accept all modes of thought. However, his eco-religious vision seems to be pluralistic in a selective sense, insofar as it can include what he considers to be traditions of eternal wisdom.

For Nasr, the roots of our ecological crisis lie in our modern technoscientific and consumeristic civilization, while the permanent solution lies in traditional cultures and religions. He thus correlates the ecological crisis with the consequences of two different civilizational epochs. In this regard, we can also say that his is a *correlative* approach. Nasr also contextualizes religious and spiritual views of nature within our present environmental situation. In other words, he sees the current ecological crisis in light of spirituality and tradition. Such a description of the environment is a *contextual* approach.

It is also important to note the way Nasr explores the ecological crisis. Having noted some relevant examples, Nasr exposes how our current environmental problems are caused by modern humans influenced by modern, secular understandings of nature. As Nasr discusses the present ecological crisis elaborately in connection with human attitudes and activities, he is using an *exploratory* approach.

Though Nasr is not interested in discussing world political affairs, he recommends that politicians and leaders take stronger steps in favor of the environment. Usually, Nasr criticizes political leaders for concentrating on

short-term benefits, but he cannot deny their significant role in diverting human attention toward ecological equilibrium. As Nasr's eco-religious vision includes political cooperation to some degree, he does employ a *political* approach.

To reiterate, Nasr emphasizes traditional values and virtues which affirm the sacredness of nature. For Nasr, if all the authentic religious and spiritual traditions of the world would pursue dialog on commonly shared ecological issues, they would contribute greatly to ecological sustainability. On this point, Nasr's eco-religious prescription seems also to be a *dialogical* approach.

Nasr does not adhere to any particular value approach of environmental ethics, but rather his way of addressing the issue signifies the traditional understanding of nature-based on spiritual understanding. He considers this the best method of reversing the current situation.

Cross-analysis of Cobb's and Nasr's Value Approaches through Reciprocal Illumination

Both Cobb and Nasr present their own understandings and suggestions for environmental sustainability by criticizing the rigid anthropocentric value approach to environmental ethics. Though their views seemingly relate to the bio-centric and eco-centric value approaches of ecological ethics, the way they view human responsibility toward the natural world is different. They do not want to compromise the position of God as with the more radical environmental movements – earthism or the Gaia hypothesis. They do not intend to reduce the special status of humans, as seen in the deep ecological or dark green movements. They instead try to revitalize a deeper feeling of responsibility toward the natural world as caretakers. Both of them focus repeatedly on human responsibility and partnership with non-human entities, calling upon humans to modify their present behaviors toward the natural world.

Here Cobb's ecological model of life and Nasr's sanctity of life model can reciprocally illuminate one another. Nasr's sanctity of life model comes from a spiritual contemplation of the primordial relationship between God and creatures, and it does not attach importance to scientific understandings. If Nasr could add a more scientific basis to his model, it would be more acceptable to our wider society, which generally accepts scientific knowledge and progress. In this context, Cobb's ecological model seems very helpful for Nasr's sanctity of life model, because Cobb bases his model on an understanding of the modern biological and ecological sciences.

On the other hand, Cobb's ecological model of life can benefit from Nasr's sanctity of life model, though Cobb is not comfortable with the terms "sanctity" and "sacred." Cobb bases his ecological model purely on modern biological science, which gives it broad appeal, but at the same

time, it might give the impression that his model is detached from the religious/spiritual foundational idea of a holistic partnership with nature. Thus Nasr's approach to life can help Cobb rethink his ecological model of life from this more holistic perspective, receiving more appreciation from spiritual/religious communities.

The way Cobb criticizes the Christian institutions and theologians of the medieval and modern periods distinguishes him from Nasr. While Nasr also criticizes Western Christianity, he does so in a more sympathetic way. Here Cobb's main argument is that by misreading the Bible, Christians developed an anthropocentric view of nature. In contrast, Nasr's main argument is that the anthropocentric approach to nature was not created by Christians, rather it was created by post-Renaissance humanism, science, industrialization, and secular ideology. Nasr does not deny the negative role of Christian scholars, institutions, and theologians in endorsing this anthropocentric view, but it happened largely by accident – sometimes it happened through pressure or force. Nasr is more familiar with the history of science and philosophy from the medieval period than Cobb. Therefore, Cobb can learn from Nasr's argument, becoming more open to the role played by Renaissance (ultra)humanism, scientific philosophy and method, rational thinking, secular ideology, and the state power of the Western European countries. He might consider whether religious institutions, leaders, clergymen, theologians, and general believers had any power at all to stop these cultural trends. Furthermore, Christianity was also weakened by internal conflicts and schism during the crucial periods. With a more historical focus, Cobb might reconsider who or what is "to blame" and rethink the Church's role in solving the problem.

Nasr can also learn from Cobb's Scriptural argument regarding anthropocentrism. Nasr does agree that if humans emphasize their superior position over non-human animals without considering their indispensable responsibility toward them, then humans simply become tyrants destroying the natural world. However, he does not focus on anthropocentrism to the extent Cobb does. Perhaps, Cobb's such argument can help Nasr understand the risks of the human-centered view.

Cobb can also benefit from Nasr's use of the term "anthropocosmic." Nasr claims that before societies moved to anthropocentrism all religious and spiritual traditions, and even all indigenous belief systems, viewed humanity as a part (though a microcosmic one) of the universe. This Nasr calls "anthropo-cosmic." Though Nasr never claims that he is using an anthropocosmic approach, his "traditional" approach implies it. Similarly, though Cobb does not claim directly that his approach is a completely eco-centric or bio-centric approach, his ecological model of life and development, and his current pursuit of an ecological civilization, seem to imply something similar. These could use the illumination of Nasr's eco-spirituality, reconnecting Cobb with Christian tradition and making his ideas more acceptable to religious persons. Likewise, Nasr's philosophical

and spiritual understanding of an anthropocosmic approach should also be illuminated by Cobb's more scientific, practical, and realistic biosphere and bioregionalism ideas, making Nasr more relevant for more secular or science-minded communities.

The Eco-Religious Understanding in Cobb's and Nasr's Interpretations

Apart from their rational character, humans are also *responsible* animals. Rationality implies the creative power of humans, while responsibility means maintaining their mutual relationship with other beings. In addressing this pertinent point, both Cobb and Nasr emphasize restoring human sympathy toward nature at a grassroots level.

Relating Humans with God and Nature

In order to clarify human responsibility to the natural world, Nasr more greatly emphasizes the relationship of nature with God. For example, he considers nature the living sign of God, the grace of God, the power of God, and the reflection of God's wisdom. In this way, Nasr interprets the attributes of nature through metaphysical understanding. For him, without re-establishing a strong relationship between humans and nature, it is impossible to rectify our wrong perceptions of nature. Here he is returning to a more primordial form of humanity. Nasr states that humans, in their nature, are more truly *pontifical* than *promethean*, and anthropocosmic, not anthropocentric (Mevorach 2015: 146). Nasr uses perennial philosophical thought to understand the inborn features of human beings (1976: 14, 136). Through this metaphysical narrative, Nasr argues that there is an intimate and inseparable relationship between humans and the rest of the natural world.

Though in a different way, Cobb also implies this primordial relationship between human beings, God, and the natural world. According to his process theological view, the natural world and God are interdependent (Cobb 1972: 124–144). Cobb wants to revive this intimacy between and among organisms, otherwise, the equilibrium will fail, and the ecosystem collapse. Though this process-based interpretation is not found in Nasr's thought, his work also implies that everything in nature is directed by God; this is to say, nature depends on God, but God does not depend on nature. In Nasr's description, God's relationship with human beings and nature is central, while in Cobb's, it is the human–nature relationship, somewhat deemphasizing God. But despite their emphases being slightly different, Cobb and Nasr both attempt to reestablish a deeper relationship between humans and the rest of God's creation.

With respect to the God–human–nature relationship, Cobb can benefit from Nasr's utilization of perennial philosophical thought and emphasis on

eternal wisdom traditions. Though Cobb certainly does not ignore these, they are less prominent in his work than one would have expected of a Christian theologian. Ironically enough, by considering or reflecting upon some of (the Muslim) Nasr's more traditional metaphysics, Cobb would find a larger sympathetic Christian audience. Likewise, Nasr could also benefit from Cobb's use of process philosophy, though Nasr could certainly not accept the controversial process claim of God's interdependence with creation, i.e., that "God affects creation, creation affects God; God depends on creation, creation depends on God." In fact, Nasr's rebuttal of such a claim could be a useful challenge for Cobb. In this way, Cobb's approach offers a dialogical way for Nasr to interpret process philosophy in light of perennial philosophy or the eternal wisdom traditions, especially that of Islam. On the other hand, as a classical theist, Nasr presents an important, revealing, and potentially transformative challenge to Cobb's process eco-theology.

Connecting "Special Human Dignity" to a Caretaking Mentality

Both scholars consider humans to be God's representative on earth (Cobb 1992: 95; Nasr 1996: 214–215). As a Christian eco-theologian, Cobb tries to reinterpret the biblical term "*imago Dei*" (image of God), while Nasr attempts to give a new interpretation of the Islamic term "*khalīfat-Allāh fīl-ard*" (God's vicegerent on earth). Cobb and Nasr relate these religious terms to taking care of the natural environment. Traditionally, "*imago Dei*" or "*khalīfa*" implies human supremacy over other non-human animals. These terms have, at least, two meanings: ruler and caretaker. Unfortunately, humans emphasize the former at the expense of the latter. Cobb and Nasr instead reinterpret both terms in a more comprehensive understanding, arguing that a bad caretaker is likewise a bad ruler, which means that a just ruler must be just toward all creation. God intends human beings to be just and benevolent rulers whose work lies in serving God's creatures rather than dominating. In the paradigm of "image of God" or "*khalīfat-Allāh*," these two scholars place more importance on the responsible activities of humans toward nature rather than displays of supremacy over non-humans.

Cobb's use of "*imago Dei*" (image of God) in understanding humanity's symbolic status and responsibility reflects the same thing as Nasr's "*khalīfat-Allāh fīl-ard*" (God's vicegerent on earth). It suffices to say that both have symbolic and metaphoric meanings that may reciprocally illuminate each other. Cobb can refer to the Islamic term "*khalīfat-Allāh fīl-ard*" to give more importance to human responsibility toward the environment. Similarly, Nasr can refer to "*imago Dei*" in order to strengthen his view of human responsibility toward the natural world. In this way, both Cobb and Nasr – Christians and Muslims – can find Scriptural common ground for collaboration.

Human Responsibility toward God's Creation

In the traditional Christian view of environmental protection, humans are seen as stewards of the natural world (Cobb 1972: 124). In the Islamic view, the Quranic term *amānah* (Quran, 33:72) can be compared with stewardship, but it is more inclusive and distinct. Cobb cannot see the concept “stewardship” being satisfactory, as it implies an anthropocentric approach in the sense that the other parts of creation have no intrinsic value (Cobb 1992: 95) and are solely for human benefit. That is why Cobb believes that stewardship is insufficient for exploring Christian eco-theology and ethics. Yet this interpretation seems inconsistent in light of Biblical guidance and the prophetic spirit. It also contradicts his own statement where he refers to the intrinsic value of creation in light of Jesus Christ. Perhaps, he misunderstands the traditional meaning of human stewardship as stewardship of purely instrumental things? Here Nasr's interpretation of human stewardship from the Islamic point of view can shed more light on Cobb's, as the latter seems superficial.

Nasr considers the concept *amānah* to be satisfactory for clarifying the Islamic eco-religious moral foundation. In Nasr's view, the word *amānah* signifies the responsibility of humans under God's commandments, for which they are accountable in the afterlife (Nasr 1996: 214–215; Nasr and BAS 2015: 14–15; Nasr and Iqbal 2007: 95). The Islamic concept of *amānah* does not exclude the intrinsic value of other creatures. Nasr argues that everything in nature is valuable, meaningful, and purposeful, and nothing is worthless in the sight of God. Humans are not the only criteria for assessing the value of other creatures. As a part of nature, humans must show respect to the inborn value of others. Since everything in nature glorifies God (Quran, 24: 41; 17: 44; 22: 18), humans should not stop the other voices that “remember” God in their own ways. Humans are given permission to utilize the components of nature for meeting their basic needs, but they are not to exploit them for luxury and excess. By repeatedly referring to *amānah*, Nasr establishes a strong sense of personal and social responsibility toward all the other creatures of God. Human beings are trustees, custodians, caretakers, stewards, etc., in the truest sense of these terms. According to Nasr, humans are entrusted with God's creation and they should maintain this trust with the utmost responsibility, or else they will be punished in the hereafter.

If Cobb would consider Nasr's interpretation of human stewardship, he could enrich his understanding from a Biblical perspective, overcoming his own negative perception of that stewardship. However, while Nasr's Biblical interpretation may be correct, it is also quite idealistic – whatever the meaning of stewardship, in reality, human beings constantly fail to recognize nature's intrinsic value. Thus Nasr should consider Cobb's argument from a practical perspective, as it accurately describes the troubled history of humankind's – and Christianity's – actual response to the natural world.

The Sacred Features of Nature

For Nasr, “nature is sacred” in the sense that it is God’s creation in due proportion and due order (Nasr 1996: 286–287; Nasr 2017: 2). That is why he believes that no part of nature should be contaminated, misused, abused, and destroyed. Humans should keep it as it is made by God. He blames the secular scientific worldview for removing the sacred characteristics of nature. For Nasr, nature is neither dead nor a machine. In his view, when nature became detached from its sacredness due to scientific modernity, the current ecological crisis truly began. To him, discovering and restoring the sacredness of nature is essential for environmental sustainability. Considering this pertinent point, Nasr urges people to revitalize and revive the sacred quality of the natural world.

Though Cobb does not impose the term “sacred” on nature, he does not disagree with what Nasr means by the sacred features of nature (Cobb 1992: 95; Cobb 1972: 117–120), though he might misread it as “divinity.” Nasr does not impose divine features or divinity on nature. He just uses a related term, “sacred,” as an inherent quality of the natural world that indicates its God-createdness and role in the holistic universe. Cobb’s “biospheric” vision could benefit from this very spiritual, very personal understanding of nature.

Sanctity of Life

In Nasr’s view, every form of life is sacred – no one should ignore the sanctity of any living form in the environment (Nasr 1993: 144–145). Though Cobb is not comfortable using the term “sanctity of life” (Sayem 2020c: 264–265) to understand the intrinsic value of life, he does not disagree with the way Nasr interprets his sanctity of life model (Cobb 1972: 117, 119–120, 144). When Cobb suggests becoming more empathetic and showing respect to life during, say, domesticating and slaughtering animals for food, this is quite similar to what Nasr is saying with “sanctity,” which boils down to respect for life and respect for the life-Giver, God. Both scholars state that no living entity should be harmed by humans without due justification. If humans are to take the life of something, it must be justified (e.g., for food) and done in a permitted way. They still believe in the (scientifically proven) hierarchy of beings wherein God has established that some creatures are food for other creatures. Neither proposes vegetarianism, though human meat production and consumption must be ethical and sustainable.

In this comparison, both scholars may be seen illuminating each other with regard to the importance/sanctity of life, be it humans or non-human animals. Cobb’s reservation with “sanctity of life” is that it may hamper the normality of human life, as is seen in Jainism (Sayem 2020c: 265). A careful study of Nasr’s usage of sanctity of life could remove some of Cobb’s doubt

and strengthen his own ecological model. On the other hand, Nasr should consider Cobb's disagreement with "sanctity of life," clarifying that he is not actually proposing a dramatic and disruptive restriction on human dietary habits, e.g., Jainism.

Reinterpreting Biblical and Qur'anic Verses Holistically

Cobb and Nasr criticize the human exploitation of nature that comes from Biblical misinterpretation (for instance, Gen 1: 28). Though Nasr frequently refers to verses in both the Bible and the Quran (for instance, 2: 29; 22: 37), Cobb never refers to the Quran. Here Cobb can benefit from Nasr's eloquent parsing of Quranic texts, solidifying his own Scripture argument. By referring to both the Bible and the Quran, respectively, we can more clearly see that humans are meant to be compassionate caretakers, not abusers of the environment.

Creating a Service-oriented Mentality

Cobb and Nasr equally focus on serving God's creatures (Cobb 1992: 93; Nasr 1993: 133–135); Nasr does so by arguing that religions place more importance on sacrifice rather than using nature for enjoyment and entertainment. For them, a true religious human being is a service-giver more than a service-taker. Cobb argues that if we believe that Jesus Christ has sacrificed himself for the sake of others, how can Christians be service-takers instead of service-providers? For Cobb, the crucifixion is a sacrificial sign of humanity's duty toward the natural world. Nasr notes that Islam emphasizes service and advises Muslims to extend this kindness to non-human creatures. Nasr also shows how Muslim mystics used to love and take care of animals.

By noting some examples from their own respective faith traditions, both scholars see that God's love lies in serving all his creatures. Here Cobb's example of Jesus Christ can be a signal to Nasr of Christianity's belief in service. Likewise, Nasr's presentation of Islam as a service-oriented religion can offer more support to Cobb's argument that human beings are service-providers.

The Insufficiency of Environmental Ethics

Both Nasr and Cobb state that mainstream environmental ethics is insufficient for addressing our unprecedented ecological crisis (Cobb 1972: 117–144; Nasr 1996: 223–280). They argue that as modern environmental ethics is a product of secular modernity, it can deal only with material existence, not spiritual matters. The unique way religious teachings motivate humans for environmental sustainability is impossible for the present form of environmental ethics, which cannot grow an inner love for the

environment. The main difference is that secular environmental ethics emphasizes the “outer” side of a thing more than its “inner” side, while religious and spiritual teachings for the environment emphasize the “inner” side of a thing more than its “outer” side. That is why both scholars emphasize a religious view of the human–nature relationship.

Though they both consider environmental ethics insufficient with respect to the ecological issues, they come to this conclusion in different ways. Nasr sees the problem from a perennial philosophical perspective while Cobb sees it from a process philosophical-theological view. As we have already discussed how Nasr’s perennial philosophy and Cobb’s process philosophy can complement each other, we are not going to repeat it here. Suffice it to say that despite their different philosophical foundations they have both come to prioritize the inner, spiritual qualities of nature rather than the outer, material characteristics. Today’s environmental ethics is interested only in the latter.

The Environmental Problem as a Spiritual Crisis

For Cobb and Nasr, the ecological crisis is humanity’s spiritual crisis (Cobb 1972: 49; Nasr 1976: 106). They argue that even though everyone today *talks* about the ecological crisis, few actually take the issue seriously. While activists appear to play an important role, any work is done without a deeper knowledge of – or a deeper feeling for – the environment. Thus their methods are insufficient. Overall, human beings know there is a problem but do not respond in a satisfactory way. For Cobb and Nasr, this is a spiritual crisis in that people have little or no spiritual concern for the environment and its health. Both believe that should people gain a spiritual feeling for the environment, they would be moved to change their attitudes and behavior.

Cobb and Nasr see a spiritual problem in what most human beings have only seen as a practical problem (Cobb 1972; Nasr 1976). Nasr places more importance on spirituality than concrete activities, while Cobb places somewhat more importance on practical action plans than spirituality. Cobb could probably benefit from Nasr’s spiritual focus, as such a broader understanding could make his proposals more marketable to religious persons. Similarly, Nasr can be enlightened by Cobb’s practical proposals. This would make Nasr more in tune with concrete efforts to save the environment, and make his tradition- and spirituality-based vision more appealing to secular groups and organizations.

Using a reciprocal illumination approach on these two scholars reveals a need to combine a spiritual feeling for nature with practical solutions. In the case of Nasr, he should consider Cobb’s practical approach as a complement to his idealistic spiritual views. Likewise, Cobb should consider Nasr’s more traditional metaphysics and spirituality as a more useful framework for his practical proposals.

Controlling Greed by Practicing Frugality

Both Cobb and Nasr connect ecological problems to uncontrolled human desire and greed (Cobb 1994: 8; Nasr 1976: 13). They consider such attitudes and behaviors undeniably destructive for the environment. Another thing they agree with is that there is no end to greed and it must be controlled. Modern humans too easily think “greed is good.” This causes them to extract natural resources in an unsustainable way. They exploit nature and pollute the environment in their overambition. For Cobb and Nasr, bringing human greed under control is crucial for environmental sustainability, but modern scientific knowledge and educational systems are also based on greed and thus lack the moral structures to regulate it.

Both scholars argue that environmental sustainability depends on compromising so-called economic affluence and inculcating ethics of compassion and protection for the natural world. But such virtues are not produced in secular and scientific education. On the other hand, world religious and cultural traditions can provide these spiritual and moral values and virtues as well as a deeper and insightful knowledge of nature. For them, the role of religions in controlling greed is crucial, as religion prioritizes the control of greed.

Nasr talks about Islamic guidelines for a balanced way of life, while Cobb refers to Christian teachings of simplicity in living. In keeping with the theme of frugality, Cobb develops the theoretical foundations for “ecological asceticism,” showing how a human can adapt his / her lifestyle in line with ecological sustainability. Though Nasr is not quite familiar with the term “ecological asceticism,” his recommendations for simplicity of lifestyle support Cobb’s idea. Cobb’s theoretical discussion of “ecological asceticism” lacks historical examples, while Nasr uses many examples from the past – Sufis, other mystics, indigenous peoples – who preferred to live simply, treating the natural world as a friend. Here both scholars can illuminate each other reciprocally. For example, if Cobb’s “ecological asceticism” were to cite past examples as Nasr does, it would bolster his argument that such asceticism is feasible. Likewise, Cobb’s “ecological asceticism” provides a modern correlate for Nasr’s appeal to the past.

Balancing Population Size

While both support limiting the human population, Cobb’s approach is more aggressive, calling for radical policies, e.g., one- or two-child policies (1972: 67). He even suggests distributing free contraceptive materials freely and imposing taxes on family size (Ibid.). Nasr does not give any specific suggestions, though he is well aware of the problem of overpopulation and its connection to the ecological crisis (Sayem 2020d: 266–267). Nasr would criticize things like free contraceptives as he is appealing to more conservative traditions, particularly Islam, that would not condone supporting

certain sexual activities. Cobb's practical approach is more direct and assertive, while Nasr's approach is more indirect and modest.

Here Cobb can be illuminated by Nasr to some extent. Cobb cannot ignore that the global population size is not the only cause of the ecological problem but must keep in mind the role of science. Indeed, modern medicine and technology have been reducing the infant and child mortality rate and increasing the longevity of human life (Sayem 2020d: 266–267). Cobb also cannot deny Nasr's point that population size has been increasing rapidly since the advent of modern science, despite a decrease in family size and marriage rates in parts of the world. Given these statistics, increased use of contraceptives and penalties for large families seems improper.

On this point, Nasr can also be illuminated by Cobb. He should not just blame science and technology, but ought to offer practical suggestions for keeping the human population at a sustainable level. Though he asks governments to take up the task (Ibid.) he has not given concrete proposals as Cobb has done. Given his traditional/Islamic point of view, he should consider methods that would be tolerable for conservative religious communities.

A Feminine Metaphor for Nature

Nature nurtures human beings like a kind and caring mother. Both Cobb and Nasr see the natural world in this way, arguing that mistreating nature can be compared to mistreating one's own mother. In Nasr's view, nature was at times harmed by pre-modern humans, but the difference between the past and the present is that in the past people still felt spiritually connected to nature, while people today have lost that connection. Nasr compares the human maltreatment of the environment to an act like kidnapping or rape. Cobb also describes how nature is harmed by modern human activities. Cobb considers the mistreatment of nature a selfish and immature act, but avoids such harsh and condemning metaphorical language. Cobb's style thus seems less dramatic and polemic and more diplomatic than Nasr's, making it more useful in today's discourse.

Connecting Modern Science and Technology to the Environmental Crisis

Both Cobb and Nasr criticize modern science and technology for the present ecological crisis and recommend restrictions on certain practices. But they differ on the continued role of science and technology. Cobb contends that it may be possible to solve the problem through innovation and reform, such as green technology. In contrast, Nasr does not see a real solution in Cobb's vision of post-modern science and technology.⁴ He agrees that, for time being, Cobb's model can help reduce pollution, but a permanent solution is needed (Nasr 1993: 71, 96–99, 129–45) in the form of sacred

science that guides humans in determining a holistic relationship between mind and body, between humans and non-humans, between Creator and creatures, and between spirituality and materialism. Nasr's argument seems logical, as it analyzes the ontological roots of modern science and technology within a strong philosophical and ethical point of view. On the other hand, Cobb's argument is also logical, because he wants immediate results through utilizing green technologies and renewable energy sources. Regardless of Nasr's skepticism, Cobb never claims these would be a *permanent* solution.

Nasr ought to take another look at Cobb's support of green technology and renewable energy. While Nasr may view them as "temporary," we think Cobb's practical suggestions can help Nasr consider the immediate steps we can take. On the other hand, Cobb ought to consider what Nasr is saying – particularly that science and technology has been corrupted by humans (Sayem 2020d: 260) and is being used primarily for so-called economic and military interests. Therefore, if humans are not enlightened by religions' eternal values and virtues, then science and technology will not be used for purpose. By using the term "sacred science," Nasr wants to indicate the purification of the human heart, which includes the hearts of scientists and technologists. In fact, Nasr wants to guide science and technology according to these eternal values and moral traditions. This ought to prompt Cobb to rethink the possibility of revitalizing traditional value systems as resources for morally guiding science and technology. After all, he already knows that modern science and technology are not really guided by ethical values.

Transforming Science and Technology for Ecological Equilibrium

With respect to integration and synthesis, Cobb's position seems more supportive than Nasr's, who sees little hope for modern science and technology. Nasr is more critical and theoretical than Cobb in analyzing the ontological root problem of modern science and technology, while Cobb is more practical, aware that it has been utilized poorly but hopeful that that could change through the use of things like green technology (1972; 1992; 1994). In contrast to integration, Nasr concentrates on transforming modern science into sacred science (Nasr 1976; 1993; 1996). Cobb's proposal implies a temporary solution, while Nasr's view deals with what he believes to be a permanent solution. On the other hand, Cobb's proposal sounds more practical, while Nasr's idea that humanity can just return to a simpler pre-modern lifestyle is unrealistic.

Rather than concentrating on the past, Nasr could benefit from Cobb's forward-thinking. It is much easier to look ahead than backward. Likewise, Cobb's post-modern approach can benefit from Nasr's traditional approach insofar as it does more greatly emphasize the importance of the traditional *wisdom* of past civilizations, even if their traditional methods and practices are unfeasible for today's world.

Criticizing Governments for Prioritizing Development over Ecological Sustainability

Cobb and Nasr both criticize national governments for prioritizing economic development at the expense of the environment (Cobb 1999a; Nasr and Iqbal 2007: 93). Nasr categorically criticizes Muslim countries for taking suicidal steps in their so-called economic development programs (Nasr and Iqbal 2007: 93), while Cobb expresses deep concern about Christian countries for the same reasons (Sayem 2020c). On this point, however, Cobb seems the more forceful.

Cobb says poorer countries should be wary of leasing out their resources, lands, and workforce to multi-national corporations, arguing that these companies will loot these countries' wealth. While these countries need money, such short thinking will devastate them in the long run. Apart from these cautious statements, Cobb tries to rectify modern economic theories and policies. Cobb sees selfish economics behind environmental destruction, so only political and economic reform will bring a permanent solution. With this in hand, he proposes "bioregionalism" – a market based on prioritizing the interest of local communities and their eco-systems.

As mentioned before, Nasr is less interested in economics, leaving a gap that could be filled by Cobb's "bioregionalism." If Nasr would have a closer look at Cobb's work, he might see how selfish economics is just as much to blame as science and technology, necessitating market reforms. Of course, Nasr might still reject it as a temporary solution. Likewise, Nasr's philosophical viewpoint can sober Cobb's enthusiasm for an economic solution, as – even if it is more effective than Nasr might think – it is unlikely to work unless there is a transformation of the human soul. Therefore, for the sake of the environment, both scholars' thoughts can and should cross-illuminate each other.

Supporting a Strong Social Movement on Environmental Issues

Both Cobb and Nasr feel it is necessary for the common people to participate in social movements in order to pressure their governments to take the necessary steps to protect and restore the environment. They argue that governments alone would not dare do so due to economic pressures from big business and industry. Therefore "the 99%'s" participation is necessary. In cultivating greater moral awareness of nature, religion can play a major role in helping organize grassroots efforts. As both scholars are trying to inspire their respective faith communities in this regard, there is great potential for reciprocal illumination.

Emphasizing Meaningful Dialog and Cooperation

Cobb and Nasr advocate for dialog between religions on the ecological issue so that different faith traditions can find common ground for action in

their religious moral teachings (Lai 2012: 91–93; Nasr 1976: 93, 106; Nasr 1992: 104–105; Nasr 1997: 34–35). Cobb and Nasr have their own distinctive approaches to dialog. For instance, Cobb primarily emphasizes a transformist approach (Lai 2012: 86–88), while Nasr concentrates on the transcendent unity of religions (King 2001: 218) and a value-centric approach (Schwencke 2009: 11). Cobb’s “transformist approach” emphasizes the goal of transforming dialog partners’ minds and attitudes from narrow sectarian-based views to a wider interreligious perspective, while Nasr’s “value-centric approach” focuses on common moral values and the Eternal Truth that exists in the transcendent unity of religions.

Here Cobb can be illuminated by Nasr’s “value-centric approach.” Transforming one’s own mind and attitude requires knowing the values and virtues of one’s own religious/spiritual traditions and that of other religious/spiritual traditions. For Nasr, such understanding precedes dialog. On the other hand, Nasr can be illuminated by Cobb, who believes that transforming one’s own attitude comes also through practice – knowledge of values and virtues is meaningless without action. Their approaches seem cooperative and supplementary to each with respect to organizing a useful and workable dialog between religious and secular people, between faith and science, and between religious leaders and political leaders. This can help reduce misunderstanding among these groups and find common ground and build the relationships needed for environmental progress.

Focusing on Global, Regional, and Local Collaboration and Cooperation

Both Cobb and Nasr view the ecological crisis as both a global and local problem (Cobb 1972: 2–11; Nasr and Iqbal 2007: 75–78, 84). In this regard, what is commonly found in both scholars’ works is the call for global leaders and policymakers to help reduce emissions levels and support local, national, and global cooperations. But local leaders and communities should not wait for national leaders to take action, but should also work on their own to mitigate these problems. They should cultivate awareness among people about the essentiality of environmental sustainability and biodiversity. Then they should motivate and mobilize locals for a strong environmental movement that puts pressure on national and international bodies to take quick, collective action. Concurrently, local people should conduct their own activities in line with ecological balance. If both local and global initiatives are taken, and if a mutual understanding and cooperation is established between them, there is hope for environmental sustainability. As Cobb and Nasr are both supportive of this approach, they can be mutually inspired and supportive of each other.

Their Practical Approaches to Environmental Protection and Sustainability

Planting Trees and Forests

Both Cobb and Nasr emphasize planting trees (Cobb 1972: 60; Cobb 1992: 37–41; Nasr and Iqbal 2007: 86–88, 91; Nasr and BAS 2015: 15–16), finding inspiration in their respective faith traditions, and are dead set against any sort of deforestation. In many ways, Cobb and Nasr have motivated people to plant trees and save forests through their own initiatives (Ibid.). They believe religious institutions can play a vital role in making their audiences more conscious of the importance of forestation, and also help by organizing their own planting initiatives, presenting volunteer work as a way to worship and love God and love the environment. Trees provide life-supporting oxygen to all life on Earth, so protecting and planting trees is part of treasuring God's creations. If churches and mosques could motivate their communities, it would have a major positive effect. We find much in Cobb and Nasr's writings that are of similar spirit and language, and that can thus contribute to mutually supportive reflection.

On Traditional Methods in Agriculture

Both Cobb and Nasr criticize modern agricultural systems (Cobb 1972: 60; Cobb 1992: 42; Nasr and Iqbal 2007: 91–92) for harming both human and environmental health. That is why Cobb and Nasr recommend a return to traditional agricultural systems and organic food production (Ibid.). In their writings, both scholars emphasize quality over quantity, arguing that the first is more important for maintaining a reasonable quality of life for human beings. On the other hand, while greater quantity feeds more people, less quality means diminishing returns.

Nasr attempts to convince Muslim farmers to follow traditional ways of cultivation, harvesting, storing, etc. (Nasr and Iqbal 2007: 91–92). Nasr believes that if farmers and other food producers are better-informed about the drawbacks of modern agricultural systems and receive governmental support, they can more easily adapt traditional methods of farming and processing.

Similarly, Cobb talks about some needed measures based on traditional agriculture methods. Cobb does not support the use of modern technology for plowing the land, as it destroys many soil-based organisms. He is also strongly against the use of chemical fertilizers and pesticides. Instead, he proposes using organic fertilizers and natural methods to drive away harmful insects. Through agricultural projects in China, Cobb is attempting to prove that it is still possible to meet basic demands through traditional methods.

Nasr recommends such practices, but Cobb both recommends *and* actively participates in such practical efforts (e.g., the China project). Might

Nasr be inspired by Cobb to take concrete action, such as supporting initiatives that push both Muslim and non-Muslim farmers to consider traditional methods?

Environmentally Friendly Village Life

Cobb and Nasr also both express their dissatisfaction with urbanization (Cobb 1994: 57–63; Nasr and Iqbal 2007: 91–95;). For Nasr, a restoration of traditional village life is crucial for long-term ecological balance (Nasr and Iqbal 2007: 91–95), because it is, practically speaking, easier to live sustainably in villages than in urban areas. Here he talks about the importance and feasibility of village life for accommodating an ecological spirit. Like Nasr, Cobb also addresses these points, but at the same time, he identifies some obstacles to village life. He blames multi-national corporations for taking over village industry and polluting their environments, and he also blames the governments that fail to stop them (Daly and Cobb 1994: 44–61). Cobb (1972) also notes that village economies are mainly dependent on agriculture, but now every step of production is controlled by multinational companies, down to the very seeds. Having observed these changes in the villages, Cobb encourages villagers to maintain control of their farmlands, seeds, livestock, and materials, keeping them from being polluted, contaminated, and hybridized.

Here Cobb seems more practical and assertive than Nasr. Nasr (who also advocates for a return to agrarian living) could benefit from Cobb's modern proposals – for instance, “bioregionalism” in the context of a sustainable village economy. On the other hand, Nasr is focused much more on the religious and philosophical traditions relevant to pre-modern village life. What this means is that while Cobb proposes the methods and means (the “how”) of a simpler, agrarian economy, Nasr provides the philosophical and religious awareness and reasoning for doing so (the “why”). Both scholars are complementary to each other in this regard. Awareness without means is useless, means without awareness are directionless.

Eco-based Construction

Both Cobb and Nasr are also concerned about the modern ways we construct buildings, houses, and roads (Cobb 1972: 60; Cobb 1992: 37–41; Nasr and Iqbal 2007: 90–91). Modern construction techniques are destructive, putting unsustainable pressure on the environment. In their view, construction materials and methods harm the environment. Nasr, of course, advocates for traditional methods. He argues that, though it is somewhat difficult and costly, these methods have less impact on the ecosystem compared to modern practices. Referencing the great constructions of the ancient world, Nasr encourages modern architects, designers, and engineers to adopt these older, time-tested methods. Though Cobb does not use the

same terminology as Nasr, he firmly supports ecologically suitable ways of building and construction, referring to Paolo Solerio's model (Cobb 1972: 60), for example. Despite their very different historical references, Nasr's appeal to ancient methods and Cobb's support for post-modern ones are complimentary. Indeed, post-modern architects have already gained inspiration from the past, though update their designs using our modern advantages in materials and technology.

Toward Less Consumption

Both Cobb and Nasr think we must curtail human overconsumption (Cobb 1992: 3; Nasr and Iqbal 2007: 90). For them, less consumption means better health and a better environment, while overconsumption means bad health and a bad environment. Both believe modern society is mainly based on consumption. The present market-based economic system continuously needs more consumers to fuel economic growth. Through advertisements companies create and expand markets for their products, persuading consumers to buy things that they do not need. We are consuming like never before, and it is characterized by excess, misuse, and abuse, leading to exhausted resources and environmental degradation. Our demand exceeds our planet's capacity; there simply is not enough to sustain our present lifestyles.

In this matter, Nasr argues that we must think more about our health and the environment's health (Nasr and Iqbal 2007: 90). For him, humans should consume in limited ways that do the least harm. Similarly, Cobb develops a model of ecological asceticism – a simpler lifestyle to decrease human consumption (Cobb 1992: 3).

Here Cobb can benefit from Nasr's articulation of traditional wisdom, finding ways to execute the latter's vision practically and concretely. Similarly, Nasr's views can be framed in a more general, accessible way through "ecological asceticism," as it is essentially what Nasr proposes but in more secular terms. Thus, cross-illumination comes in handy here as well.

Better Economic Policies and Practices

In the modern world, economic development is given the highest priority while spiritual or holistic development is ignored. It is true that a basic form of economic development is essential for human survival, but it should be as just and sustainable as possible. For Cobb, the current ecological crisis is not due to basic economic development, but rather *overdevelopment* (Daly and Cobb, 1994: 382–406; Cobb 1994: vii–ix). He directly connects the ecological crisis to our economic habits. Cobb argues that behind all human activity, there is pure economic interest; it is today our only motivation. We cannot bring about environmental sustainability without reforming our modern economical activities. Regarding this point, Cobb addresses some basic economic functions of human life from the perspective of sustainable

development. He criticizes the dominant economic theories because such theories inspire modern humans to always seek more wealth and more comfort, giving value only to economic development and never ecological balance. In these economic theories, the natural environment has no intrinsic value; it is only a machine for meeting human desires.

Considering these serious drawbacks of the modern economic system, Cobb presents an alternative framework for sustainable economic development (Daly and Cobb 1994). As part of his model, he criticizes the use of GDP/GNP growth as a metric for well-being. He argues that it exacerbates disequilibrium between humans and the natural world because what it regards as progress (increased human productivity and development) comes at the cost of something such scales do not measure, that is, ecological health and sustainability. While humans need a basic economy to survive and thrive, its functioning should make as little impact on the environment as possible. Any economic function should be compatible with the ecosystem. If it is not, an alternative must be found. Cobb calls for a system that is not controlled by markets (which are controlled by corporations), but rather one that has the social, political, and legal structures to control markets for the sake of human and environmental health. He encourages instead local markets that control agro-economical production and efficiently *and sufficiently* supply the rest of the country (and world). This is something that Cobb's bioregionalism seems suited for, as it also includes community-based economic, industrial, and marketing activities, where community interests along with ecological balance are given priority. As far as international commerce and trade are concerned, Cobb suggests balanced and fair trade between nations (Daly and Cobb 1994: 229). In this way, Cobb attempts to reconstruct modern economics according to ecological sustainability.

Like Cobb, Nasr also sees the logical relationship between economic activities and environmental problems, though he has not offered any specific model for controlling human economic activities at a sustainable level. In this regard, Nasr talks about the role of wise economists (Nasr and Iqbal 2007: 79), but he does not think that they can change modern humans' economic views and behavior. We believe Cobb's ecological model of development would be acceptable to Nasr, even if he does not see it as a permanent solution. For Nasr, any step taken that is based on secular science and technology will never be enough. A long-term solution requires a spiritual worldview that motivates humans to control their economic activities in line with ecological equilibrium. Until then, humans will never make the right decision with respect to economics and ecology. Cobb is obviously more optimistic than Nasr, because Cobb attempts to find a solution within the existing system, which seems feasible. On the other hand, Nasr suggests returning to the traditional approach, which is more idealistic than realistic. We believe Nasr ought to consider what Cobb proposes, as it would make his vision more possible.

Reducing Carbon Emissions

Our greatest threat, global warming, is a direct consequence of carbon dioxide emissions. Since the Industrial Revolution, coal-based energy has discharged huge amounts of this poison into the air. And coal has not satisfied our appetites; other fossil fuels like oil and gas have contributed to polluted skies and a warming planet. Though providing short-term benefits in terms of living standards and productivity, long-term fossil-fueled industrialization is leading us toward disaster (Cobb 1972: 7–9; Nasr and Iqbal 2007: 81–82).

Cobb and Nasr both agree that carbon dioxide emissions must be immediately brought back to a sustainable level using renewable energy sources like windmills, turbines, solar, etc. Cobb also encourages increased funding and development of public transport and a reduction in private vehicles (Cobb 1972: 60). So that all motorized transport may be drastically reduced, he also encourages commonsense practices like walking and cycling, calling upon city authorities to build dedicated lanes for this.

Like Cobb, Nasr also criticizes the modern habit of owning private cars (Nasr and Iqbal 2007: 81–82) and recommends giving this up for the sake of environmental protection. He also encourages using public transport, walking, and cycling, and especially criticizes the many Muslim countries that have based their economies on oil production, and he, therefore, encourages a prudent shift to green energy. Nasr is not as focused on such practical and technological solutions as Cobb, so the latter's diligent work in that area can complement Nasr's more abstract proposals.

Discouraging Waste and Encouraging Recycling

Both scholars criticize the indiscriminate use of irreplaceable metals and plastic items and recommend biodegradable replacements. Once again, Cobb has gone into more detail about this than Nasr. For instance, Cobb calls for major taxes and restrictions on non-recyclable products (Cobb 1972: 60). As Nasr offers no specific ideas regarding avoiding waste and encouraging recycling, Cobb's practical solutions would be very helpful additions to his eco-religious vision.

Conclusion

In opposition to modernity's materialistic and mechanistic view of nature, both scholars present an organic view of the world, connecting it to religion and spirituality, though in very different ways. In order to solve the present ecological crisis, Cobb develops an ecological model of life and development based on process philosophy and process theology, while Nasr presents the "sanctity of life" model and emphasizes the sacred features of nature based on perennial philosophy and eternal wisdoms of religious

traditions. In their eco-religious approaches to environmental issues, Cobb seems far more practical than Nasr, while Nasr seems more spiritual than Cobb. Nasr sees the solution to the environmental crisis in going back to traditional ways of life, but Cobb is critical of this. He wants instead to reform theology and ethics, while Nasr prefers using traditional religious or spiritual views of nature, *as they are*, to mitigate the ecological crisis. As to whether science and technology can help in this regard, Cobb accepts more environment-conscious “postmodern” science but Nasr sticks with pre-modern science. Both Cobb and Nasr call for multi-faith dialog and co-operation that involves scientists, political leaders, politicians, and also includes non-religious persons and organizations.

Despite their acknowledgment of the hierarchies in nature, neither supports human supremacy and domination, rather they emphasize pleasing God through serving God’s creation. In their view, due to spiritual emptiness, modern humans cannot feel deeply connected with nature. Simply put, our present ecological crisis is a spiritual crisis. Both of them talk about eco-spirituality, but Nasr is more serious about this than Cobb. Since both scholars identify human greed as the basic cause of environmental degradation, they are equally against uncontrolled greed.

They also criticize modern science and technology for degrading the environment, though this they also do differently. Cobb wants to make modern science and technology eco-friendly, but Nasr calls for a radical return of “sacred science” for a more permanent solution. Nasr does not seem confident in post-modern science and technology, such as green technologies.

Cobb and Nasr both condemn governments for prioritizing economic development over environmental sustainability. We can say that, for them, ecological balance represents “heart” and economic activities “the body.” Heart and body constitute a complete human being, as a human being cannot exist without both. Similarly, humans need both economic affluence and sustainable ecology, but the former should not come at the expense of the latter; in fact, our ecological heart should take priority over our economic body.

Both scholars consider the environmental crisis to be both a global and local problem, so action is needed at all levels. As for concrete aims, they both propose reforestation, the traditional ways of agriculture, environmentally friendly villages, ecological models of life, eco-friendly construction, reduced consumption, holistic and sustainable economics, and reduction or elimination of the use of fossil fuels.

It is evident that both scholars are very concerned about the ecological crisis and frame it through religious understandings of nature, moral values, and practical solutions. And in their agreements and disagreements, they can illuminate each other. In particular, Cobb’s “ecological model of life and development” can illuminate Nasr’s “sanctity of life” and “sacredness of nature” themes, and vice-versa. From a holistic perspective, a cross-analytical survey of their eco-religious visions can enlighten religious practitioners, scholars, and leaders, especially those from Christian and Muslim communities.

Notes

- 1 Furthermore, Nasr points out: “it is not only we who possess consciousness; Nature is also consciousness in its own way. Usually, one speaks of inanimate, animate, and conscious beings. However, in a deeper sense, we live in a universe that is alive, a living universe extending from the galaxies and the stars to the depths of the oceans. It is, too, a conscious universe, with varying modes of consciousness that manifest at different levels according to the nature of various beings” (Nasr 2017: 8).
- 2 For a brief note, see Sayem, Md. Abu (2018a), Islamic Teaching and Practice of Environmental Ethics in Bangladesh: A Case Study, *Quest: Studies on Religion and Cultures in Asia*, 3, 1–2.
- 3 In reference to Philip Sherrard’s narratives, Nasr (1996: 202) agrees that the Christian view was actually theo-anthropocosmic, but later it changed. As Cobb connects the present ecological problems with Christian theological perspectives and process philosophical views of cosmology, it is better to define his approach as theo-anthropocosmic rather than anthropocentric and theocentric.
- 4 In his works (1976; 1993; 1996), Nasr repeatedly argues that the permanent solution to the present ecological crisis lies in the traditional understanding of nature, not in technological use. For further details, see Sayem, Md. Abu (2018c), A Scientific Worldview of Nature and Environmental Problems with a special Concentration on Seyyed Hossein Nasr’s Understanding of Environmental Sustainability, *Journal of Islam in Asia*, 15(2), 312–328.

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6 Conclusion: Summary of the Study and Recommendations

Introduction

From the preceding pages it becomes evident that this book was initiated to connect ecological issues with Christianity and Islam by focusing on the eco-religious understandings and recommendations of John B. Cobb and Seyyed Hossein Nasr. At this concluding stage, the chapter first summarizes the book and then brings some significant recommendations. Some extracts are brought back to the readers from the previous chapters to remind them about the purposes and significance of the present research and to inform them of how much achievement the book has accomplished so far. The chapter recommends future studies and suggests how the present research can offer some contributing knowledge for future works on religion and ecological crisis, in general, and on Cobb's and Nasr's eco-religious understanding, in particular. It also gives an indication of how the present study can encourage future research in the field of religion and ecological crisis.

A Summary of the Book

The present environmental issues – global warming/climate change, air pollution, water and soil contamination, deforestation, depletion of natural resources, loss of biodiversity, desertification, acid rain, ocean acidification, degraded ecosystems, etc. – are serious threats to all life on earth. All these problems are a result of greedy, uncontrolled human activity based on an ideology of wealth and power. Modern science and technology are being used as a tool to make human life more comfortable without considering the consequences for the natural environment. Fossil-fuelled industrialization, energy, and transport are taking our ecological crisis past the point of no return. If humans cannot sufficiently address our environmental problems, we face catastrophe.

Though some people are working to reduce environmental threats, most people are simply not conscious about the problems or refuse to take action. Some know about and even experience climate change (especially in

poorer countries), but have no power to do anything about it. Modern humans and societies are not willing to compromise their economic affluence and military supremacy for the greater cause of environmental sustainability. While environmental issues are being discussed by contemporary scholars from various aspects, these efforts alone are not sufficient. Even this project does not claim to offer a perfect solution; it just explores the issue from a faith perspective, bringing together Cobb's and Nasr's eco-religious understandings.

Human action is a manifestation of human thought. Without reforming the human mind, it is not possible to change our behavior. In line with this argument, Lynn White (1967) and Arnold Toynbee (1972), among others, blame monotheistic religions (especially the Judeo-Christian tradition) for unleashing the concept of human supremacy over non-human animals. They consider this the main cause of the present ecological crisis. Similarly, other secular environmental philosophers and environmental activists, being convinced by White's (1967) and Toynbee's (1972) arguments, have aired their own criticisms. Furthermore, these groups argue that monotheistic religions endorsed certain scientific discoveries and technological applications for "proving" God-giving human superiority over other animals. In this way, an anti-monotheistic trend exists in the environmental community.

But White's and Toynbee's polemics are refuted by scholars of Christian theology, religious studies, and other disciplines. For instance, Moncrief (1970) disproves monotheism as a cause of modern environmental degradation. Through evidence from the ancient Chinese and Roman worlds, Tuan (1968; 1970) shows how their non-monotheistic religions also degraded the environment. Tuan's evidence disproves White's (1967) and Toynbee's (1972) one-sided and uncritical hypothesis that considers polytheistic religious traditions to be the most environmentally friendly. Following such criticism, White modified his argument in later writings (1973; 1978), but there was no such reaction from Toynbee, whom we might consider the more aggressive Christian critic. White's (1967) critical analysis of Judeo-Christian human supremacy did open the door to seeing environmental problems from religious perspectives, and other scholars have continued down this road.

Impressed by White's (1967) thesis, John B. Cobb, Jr. became interested in investigating and interpreting the Christian faith with respect to the current ecological crisis. Cobb neither rejects White's thesis completely nor accepts it fully, but rather blames a medieval Christian misreading of the biblical creation story for changing its theocentric meaning to an anthropocentric one. Being an admirer of White's brave initiative, Cobb develops his own understanding of the environment based on process theology and ecological science. By referring to the second creation story (Gen. 2:15) and other Biblical narratives, Cobb argues that humans should behave as if they were caring guests of the Earth, not its owners.

Cobb bases his Christian eco-theological understanding mainly on process theology, according to which God and creation are considered inter-related and interdependent with one another, implying that God also experiences the pleasure and pain of His creatures. In noting such understanding, Cobb argues that humans should avoid doing anything which causes suffering to God's creatures. Humans should not disturb or consume other animal and plant species without justification because they have their own intrinsic value, they are valuable in the sight of God, they glorify God's name in their own ways, they are adding to God's being, they are deeply-related to God, and they are performing their assigned duties. For Cobb, to harm God's creatures means to disturb God, and to care and feel for God's creatures means to love God. Cobb believes that all creatures have value, but there are differences in the values. Cobb's argument for hierarchical values, though criticized by deep ecologists and eco-feminists, seems consistent and compatible with the natural system.

Not satisfied with just process theology, Cobb has further refined his eco-theology through studies in modern biological science. This has helped him to develop an organic view of the world in distinction to the wrong-headed mechanistic and materialistic worldview. His ecological model (Cobb 1972; 1982 with Birch; 1989 with Daly; 1994) and biospheric vision (Daly and Cobb 1989: 155, 252, 376, 391–393; Cobb 1991: 43), though criticized by some as utopian (Daniel and Ehrlich 1990: 346) or impractical (Kasun 1991: 46), presents the Earth as a shared space for all lifeforms and demonstrates the intrinsic value of the environment.

Though Cobb connects our present environmental problems to the Industrial Revolution in Western Europe and the massive adoption of technology, he believes economics to be the most influential factor behind the crisis. He argues that behind every human action there is economic interest. For Cobb, modern economic theories have turned humans into purely economic beings for whom their material wants take priority. In our pursuit of wealth, ethical considerations are ignored, putting increasing pressure on nature to fulfill our bottomless greed. Cobb calls this "economism," wherein only economic considerations matter. Criticizing consumerism-based modern civilization, Cobb suggests an environmentally friendly and balanced economic system, "bioregionalism" – "a new localised vision of human self-government" (Northcott 1996: 308), which will give priority to keeping the local ecosystem sustainable.

Technology-based modern civilization is dependent on fossil-based energy sources that pollute the environment. Cobb is aware of the necessity of energy, and without developing a viable energy system, environmental issues cannot be addressed. In this regard, Cobb calls for alternative energy sources to replace fossil fuels. An energy crisis can be sustainably solved through green technology and renewable energy. Thus ranging from Christian Scripture, moral theology, and process theology, to modern biology, economics, and technology, Cobb's biocentric view of

nature has responded to our present environmental needs from a post-modern perspective.

We saw how Nasr's eyes were opened to the environmental crisis through his own personal observation and admiration of nature and through Carson's (1962) *Silent Spring*. Even before White's (1967) seminal paper was published, Nasr started his work, connecting ecological issues with the religious and spiritual traditions of the world (though his work was not as popular as White's) (Sayem 2018c: 315; Quadir 2013: 14). Unlike White, Nasr blames European humanism and its successors for the crisis, arguing that the ultra-humanistic approach of the Renaissance promoted an anthropocentric view of nature which was later echoed in the rise of modern science and the Industrial Revolution (Nasr 1976; 1996). For Nasr, even the scholars of the European Enlightenment were convinced to endorse the human-centric view of nature. Though the Christian church tried to check it, as it was an assault on the God-centric view, it could not cope with the prevailing scientific and philosophical understanding of nature and the secular ideology of state policies. As a result, God-centrism or God-ism was replaced by human-centrism or humanism. Being defeated by the secular and scientific worldview, Christian institutions and scholars were silenced into simply not talking about or challenging the natural sciences, indirectly endorsing human progress as a symbol of our God-gifted superiority over nature.

After reviewing the relevant chronological events behind the present ecological crisis, Nasr explores how the secular scientific understanding of nature degraded the natural environment by perceiving it from a mechanistic and materialistic worldview. According to this view, nature is non-living and works like a machine, and it is denied the sacred qualities it has in religion and spirituality. Thus humans were given the license to exploit the natural world in order to fulfill their endless desires. Nasr blames "scientism" for reducing the acquiring of knowledge to only the scientific methods, dismissing the other ways of knowing reality (i.e., religion) as superstitions. In Nasr's view, the scientific worldview of nature has made modern humans even greedier for worldly pleasures, erasing the concept of the sanctity of life from the human mind, denying the intrinsic value of nature, and finally placing human beings in the place of God. Modern science and its vast technological application have no moral/ethical foundations which can control our policies and actions. Nasr is convinced enough to state that the present ecological crisis cannot be solved by keeping the modern scientific view of nature unchanged. As an alternative approach to the modern scientific worldview, Nasr talks about the pre-modern "traditional" worldview, where nature is seen as a living, conscious, and sacred body (Nasr 2017: 9)

Nasr bases his traditional worldview of nature on the "sacred sciences," i.e., perennial philosophy, eternal wisdom traditions, and the traditional science of the God-human-nature hierarchical relationship. Like Cobb,

Nasr argues that God's creation is not meaningless, it is rather purposeful; what God has created is sacred and always praises and glorifies the names of God. It thus has its own inherent value which should not be violated by human beings. Though Nasr believes in the intrinsic value of every single substance of the natural world, he sees hierarchy according to sentience and consciousness. Nasr is not satisfied with the present form of environmental ethics, because it cannot revitalize an inner feeling and deeper connection between humans and nature. For Nasr, one must know the human–nature relationship before considering our behavior toward nature, because a deeper understanding of the relationship is what guides that behavior.

Nasr also connects the present environmental crisis to the deviation of humans from God. In this regard, Nasr argues that when humans are displaced from God, they are disconnected from nature; viable human–nature relationships come through a close relationship with God. Restoring the God–human relationship, which is broken by secular and scientific ideologies, is essential for restoring the human relationship with the environment. Nasr's traditional approach, though criticized by some scholars (Heinen 1994: 682; Mevorach 2015), shows the intrinsic value of traditional knowledge for addressing environmental problems. Though it is difficult to go back to the traditional ways of life, it does show that humans must compromise their present scientific understanding of nature and economic policies if they really want to see ecological sustainability.

Cobb and Nasr have the same purpose of addressing the present ecological crisis, but their methods and approaches are not the same. By reforming the Christian understanding of nature, Cobb wants to see a new Christianity that is more favorable to ecological sustainability. In contrast, Nasr emphasizes a complete return to the traditional understanding of nature (though he reinterprets some Islamic concepts related to stewardship). We may call Cobb's theoretical framework *reconstructive*, and Nasr's theoretical interpretation a *retrieval* approach. Similarly, both scholars reject the metaphor of the machine for nature, viewing it as a holistic, living entity.

Through process theology and biology, Cobb has developed an organic view of the world, while Nasr envisions a living and conscious nature through the metaphysics of perennial philosophy, the eternal wisdom of religions, and the understanding of a primordial human–nature connection. Cobb is more critical of Christianity than Nasr. Cobb addresses “economism” while Nasr addresses “scientism” as the ideological root causes of the ecological crisis.

As for rectifying modern economic theories and policies, Cobb talks about “bioregionalism.” Nasr has no specific recommendation though he is also a critic of the modern economic system. On the other hand, Nasr talks about replacing modern science with the sacred and traditional sciences. On this, Cobb has no specific recommendation though he is also a critic of modern science. As for some practical initiatives like reducing population size, introducing green technologies, and developing renewable energy

sources, Cobb is more vocal than Nasr. Both Cobb and Nasr criticize secular and scientific ideologies for denouncing the sacred character of nature, and for presenting a completely materialistic and mechanistic understanding of the natural world.

As for an alternative approach to the modern scientific worldview, both scholars come from two different sides: Cobb talks about a post-modern approach with an ecological model of life and development, while Nasr suggests the pre-modern approach of going back to the traditional worldview that nature is sacred. From the point of view of modernity, we can say that Cobb is a postmodernist and Nasr is a traditionalist. Both scholars criticize modern agricultural systems and recommend returning to older and simpler methods. They also appreciate the benefits of traditional village life as an alternative to consumeristic urbanism. As both scholars believe in the hierarchical value system, they are criticized by deep ecologists, eco-feminists, and ultra-secular environmental activists.

As Cobb has adopted process philosophy and process theology in his eco-theological understanding, he believes in the relatively interdependent, interactional, and interrelated relationship of God and creation. On the other hand, Nasr's traditional understanding of God's absoluteness does not support this interdependency. However, Cobb and Nasr share the same concern for the environment, even if coming from two different directions. Though Cobb's post-modern approach and Nasr's traditional approach seemingly contradict each other, both of these approaches identify the root causes of the present ecological crisis – economism in the case of Cobb and scientism in the words of Nasr – and illuminate their understandings mutually. Similarly, Nasr's eco-spiritual vision and Cobb's biospheric foresight enrich each other on the said issue. Thus, both scholars' thoughts were compared and contrasted by keeping them in a dialogical mode, in which a neutral and unbiased evaluation was made between Cobb's and Nasr's visions of ecological equilibrium. The overall study has found Cobb's post-modern approach and Nasr's traditional approach important for reforming human understanding and activity with respect to the environment. Their contrasting viewpoints are also helpful for the cross-illumination of their work and their respective religious traditions.

Recommendations

Further research should be done on Cobb and Nasr from other perspectives. For example, a comparative study of Cobb's post-modern approach and Nasr's traditional approach, Cobb's biospheric vision and Nasr's sanctity of life vision, Cobb's process theology and Nasr's perennial philosophy, or Cobb's green science and Nasr's sacred/traditional science, can be done. We recommend continuing studies on both Cobb and Nasr from comparative and other aspects and expect that future researchers will shed more light on Cobb's and Nasr's eco-religious understandings and suggestions.

As for establishing and implementing religious moral foundations for reducing the present ecological crisis, the present research offers some specific suggestions. As a study on eco-religious understanding can make humans more conscious and concerned for ecological equilibrium, the general public should be encouraged to read on the topic. Those who have interest in doing research on eco-religious understanding should be supported by producing research books, journal papers, handbooks, introductory books, booklets, newspaper articles, etc. from eco-religious perspectives. Universities and research institutes should provide more logistic supports for researching ecological issues from the perspectives of faith and spiritual traditions. Some new departments and research institutes may be created for advanced studies on religions, cultures, and environmental sustainability. Academic activities like conferences, symposiums, workshops, public talks, etc., should be organized for connecting faith and spiritual traditions with environmental concerns. Religions' roles in environmental sustainability should be included in all curriculums, primary to tertiary, in order to provide a basic and sound knowledge of the essentiality of ecological equilibrium among the future generations.

Religious institutions, faith-based communities, and religious non-governmental organizations (RNGOs) should give more priority to environmental issues in their routine work. Religious institutions, for example, Christian Seminaries and Islamic educational institutes (*madrasah* and other forms of educational institutes based on Islamic and Modern systems), should include religion and ecology in their curriculum and course materials in order to enlighten students about the inescapable relationship between humans and nature. Religious sermons, on Sunday for Christians and Friday for Muslims, should focus on the present ecological crisis in order to make their audiences more conscious about the issues and motivate them to act responsibly with respect to the environment. Religious scholars and clergypersons should continue advising their respective faith communities to follow eco-religious guidelines in their daily activities. Religious non-governmental organizations, which usually deal with human development, should consider ecologically friendly policies while executing their programs and promoting the human–nature relationship through their activities.

Scientists should humbly consider that modern science and technology alone cannot solve our present environmental problems. Modern science and technology have certain analytical tools to analyze the apparent causes and also can provide temporary solutions like green technology, but, unfortunately, they do not have the moral or ethical foundations to guide new discoveries, scientific theories, and technological advancements in accordance with ecological equilibrium. Though modern science and technology have made human life more comfortable, it has disconnected us from nature. Modern scientists, engineers, and technicians should know that artificiality cannot replace naturality. Sciences and technologies have their own limitations, and thus they need to cooperate with the faith and spiritual

traditions of the world. According to Nasr, scientists should not promote “scientism;” they should compromise with other sources of knowledge, like religion. According to Cobb’s argument, scientists should use green science and technology to create a post-industrial ecological civilization.

This research recommends controlling modern economic activities and keeping them in accordance with ecological equilibrium. In this regard, economic theorists can work efficiently by reforming the ongoing economic theories and giving priority to environmental sustainability. Cobb notes that modern humans are obsessed with economic affluence and are leading their lives according to “economism” – a dangerous ideology that makes humans slaves to economic activities. Modern economic theorists, policy-makers, financial stakeholders, bosses, the working class, and all other persons should stop judging everything in accordance with “economism.” To oppose “economism,” Cobb’s bioregionalism approach should be considered for building new economic theories and controlling economic activities, state economic policies, financial functions, and domestic and global trade and commerce.

The current study suggests rejecting the mechanistic and materialistic view of nature by introducing an organic view of the Earth. Though Nasr does not directly use the phrase “organic view of nature,” his view that nature is a conscious being or body supports Cobb’s idea. Similarly, Cobb’s use of living metaphors for nature seems to endorse Nasr’s idea. The present research argues that if an organic view of nature is accepted widely, it will help rectify human perceptions and curtail their destructive activities. The scientific worldview of nature has broken the human–nature relationship while an organic view of nature can restore it. Both Cobb and Nasr emphasize revitalizing a sense of harmonious relationship between humans and the natural world. Every human activity should maintain that relationship.

Due to the worldwide influence of secular ideology, along with the scientific understanding of nature, modern humans have come to deny the sacred characteristics of nature and the sanctity of all life forms, giving them license to exploit nature for self-interest. Our study maintains that if humanity can remember nature as sacred and all life as sacrosanct, in contrast to a materialistic and mechanistic view, it will lead us to reform our secular attitudes and destructive activities and move us toward equilibrium.

The present research recommends supporting Cobb’s and Nasr’s hierarchical value system. Both scholars support the intrinsic and inherent value of every single substance in the natural world, but all values are not of the same rank. Cobb’s and Nasr’s understandings refute the value approaches of deep ecology, ultra-ecocentrism/ultra-biocentrism, and ecofeminism. Given natural differences in lifeforms with respect to sentience and capacities for feeling pleasure and pain, Cobb’s and Nasr’s understandings of nature’s hierarchies seem logical and justifiable.

Some environmental philosophers who are supporters of ultra-ecocentric/ultra-biocentric or ecofeminist approaches criticize the hierarchical value

system because it positions humans over non-human animals, which indicates that humans are more precious than non-human life. However, Cobb's and Nasr's hierarchical valuations do not provide an open license to exploit the environment in an unjustified way, nor do they blindly support uncontrolled human activities, but rather they see humans as responsible animals, custodians of God's creatures, and participants in God's Earth along with other creatures. Never do they claim such hierarchy makes human beings the "owners" of the planet.

All creatures have the same and equal value, but humans are dependent on non-human animals and plants for food. It would be illogical to say that humans should avoid eating meat, but rather we should focus more on how well humans treat animals in their consumption of them. Unnecessary harm and unjustifiable excess should be avoided. Cobb's and Nasr's understanding of human-animal hierarchy is a sound way to bring about ecological sustainability.

The ongoing interfaith and multi-faith dialogs on the ecological crisis are noted, but these are insufficient. This study recommends more collaboration and cooperation among the religious and spiritual traditions of the world on the issue. Due to convenience and practicality, we prefer to use the term *multi-faith* instead of *interfaith* for dialog among practitioners from different religious communities, because "multi-faith" is more inclusive than "inter-faith." As the present ecological crisis needs more cooperation and collaboration from many perspectives, the term "multi-faith" is more suitable.

Multi-faith initiatives should not be limited to followers of the world's religious and spiritual traditions, but rather should include all other cultural and civilizational traditions as dialog partners; they should be a bridge between religious and non-religious initiatives. Multi-faith dialog and cooperation should be a platform from which to negotiate with public agencies and world leaders and try to convince them to create ecologically friendly policies. In this way, faith-based environmental movements and activists, clergypersons, religious scholars, and religious communities, despite the differences among them, should come together and work with non-religious persons, organizations, societies, movements, national and international bodies, etc., in order to solve our present crisis.

Regarding the theoretical foundations of such dialogs, Cobb's and Nasr's eco-religious understandings and prescriptions can offer some concrete parameters and bases. The way Cobb and Nasr address the present ecological crisis by connecting religious and traditional worldviews is something no one else has done. Though both scholars focus on their respective religious traditions, Christianity and Islam, their eco-religious understandings and suggestions should not be reduced to Christianity and Islam, but ought to be appreciated by other religious communities, institutions, faith-based organizations, policymakers, public agencies, non-governmental organizations, national and international forums, etc., for the greater interest of ecological sustainability. Having considered the ground of Cobb's and Nasr's eco-religious views and

advice for dealing with our ecological crisis, we recommend their eco-religious theoretical frameworks and recommendations for multi-faith dialogs and cooperative programs.

Conclusion

Suffice it to say that this study has achieved the majority of its targeted goals. Despite its limitation, this monograph is unique in comparing Cobb's eco-theological vision with Nasr's eco-spiritual vision, and in comparing their cross-illuminated thoughts with current environmental issues, thus ecological discourse from a religious perspective. This work can encourage further studies on religions and environmental issues.

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